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LINCOLN AREA STUDY, 1970

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ACKNOWLEDGEMENTS

Although it would require many pages to name and thank all the individuals who have helped on this project since the beginning of the "Charrette" of October, 1969, those of us from Montana State University are particularly grateful to the people of Lincoln who fed us, took us into their homes, and patiently worked with us over the past year.

Large portions of this document were adapted from other studies; Art Olson and Lamonte Bingham of the U. S. Soil Conservation Service are primarily responsible for the work on soils. The social values studies of the Blackfoot Valley were done with considerable assistance from personnel of the Lincoln Ranger Station, U. S. Forest Service.

Most of the basic research and planning work contained in this document was done by Montana State University students: John Daniel, David Kambic, Rick Labunski, Deane Leidholt, Jim McDonald, Marge McKenzie, Neil McTavish, Paul Mousseau, Harold Nelson, Allen Olson, Allen Saunders, Mel Schenck, and Lowell Springer (all of the School of Architecture), Mike Koehnke (Department of History, Government and Political Science), Carolyn Mueller (Sociology Department), and Jim Nybo (Department of Economics). These students formed the "Lincoln Planning Group" which was coordinated by Jay Lynch.

Lyle Balderson and Hal Price of the Montana Department of Planning and Economic Development, William R. Lassey, Director of the Center for Planning and Development, and Professor David Wessel of the School of Architecture at Montana State University, provided technical assistance and advice. Dorothy Bradley of Bozeman was of considerable assistance, and Shirley Wyckman of the Center for Planning and Development at Montana State University, was responsible for preparing the manuscript for publication.

Montana State University has been working with the citizens of Lincoln since 1968 in an effort to help the community prepare for the advent of a potential new mining operation in the Blackfoot Valley. Faculty members have assisted the community in outlining their needs, have consulted with local leaders on alternatives for community planning and development, and have helped to clarify and solve specific community development problems.

This program has been supported in large part through funds available from Title I of the Higher Education Act of 1965, but the Cooperative Extension Service has also supplied assistance through state and federal funds. The "charrette" planning process initiated in 1969 was funded through the U. S. Office of Education and had the specific purpose of providing assistance for educational planning. The charrette was the most intensive part of the activities in Lincoln, and eventually led to this planning report. A grant from the State Department of Planning and Economic Development, supplemented by funds from the Title I grant to the Center for Planning and Development at MSU, provided the funds necessary to prepare this report.

The effort to assist Lincoln has been somewhat of an immovation since the University has had relatively little experience in interdisciplinary community planning projects and there were no clear or established guidelines as to how we could best function. This report represents the first effort by the University to prepare specific planning guidelines for a community. At no time did the University intend to prescribe solutions for the community of Lincoln. Rather, faculty and students tried to respond to specific questions and to provide resources that were defined as useful by members of the Lincoln community. Because the program was experimental, there were quite often serious questions in the minds of both faculty and community members about the overall usefulness of our association. On occasion members of the Lincoln community were critical of the University's efforts, and faculty were similarly impatient with local citizens.

We have learned a great deal from each other; the Lincoln community is much better prepared to deal with their problems now than they were before the University involvement in Lincoln. Likewise the University is much better prepared to be of assistance to Lincoln and other communities when severe problems become evident. It has been a valuable experience for all the students and faculty members involved.

William R. Lassey, Director Center for Planning and Development

introduction



Chapter I

INTRODUCTION

Lincoln is an unincorporated community located midway between Great Falls, and Missoula, Montana, on Highway 200. It is in many respects typical of a number of small towns in Montana and the sparsely populated neighboring states. Such small towns usually suffer from the lack of many services that are provided to residents of areas with larger populations and higher densities. The inadequacies affect educational facilities, public transportation systems and roadways, police and fire protection, retail establishments, medical services, recreation facilities, and the maintenance of such facilities. The residents of Lincoln remain here despite inconveniences and inadequate services, for several important reasons. They appreciate the Blackfoot Valley for its great natural beauty and realize that its proximity to the proposed Lincoln-Scapegoat Wilderness area may help to preserve its natural beauty for future generations. They foresee the great economic potential of tourist and mining industries in the valley, although many are concerned about ecological and social consequences of an uncontrolled exploitation of those natural and human resources. They would like to insure the peace and lifestyle that they cannot find in an urban atmosphere.

The people of Lincoln are faced with a shortage of educational facilities in the immediate area. The rising number of high school students commuting to Augusta via bus is becoming economically and functionally unfeasible. The "Lincoln Educational Charrette" was organized in the Fall of 1969 to investigate this problem. The charrette enabled the community to study methods of alleviating inadequate educational facilities, as well as other problems which may result if the Anaconda Company develops an open pit mine in the area. What began as a study of educational facilities soon mushroomed into a concentrated effort to outline the problems of not only the immediate community, but of the entire Blackfoot Valley.

A group of students from Montana State University at Bozeman, most of whom had participated in the original charrette, assisted with the tasks of defining the problems of the Lincoln Valley and searching for possible solutions to these problems. This group, known as "The Lincoln Planning Group", formulated a comprehensive plan for the Lincoln Valley, utilizing the expertise offered by various resources of the university system, governmental agencies, private institutions, and citizens of Lincoln. Much of this preliminary investigation is recorded in a manuscript entitled, "Lincoln Educational Facilities 1969," published in February of 1970.

Since the publication of "Lincoln Educational Facilities 1969," the citizens of Lincoln have worked together on those goals which they considered of first priority. These include: expanded educational facilities, adequate sewer and water facilities, and a plan for the controlled growth and improvement of the community. The Lincoln Coordinating Committee felt that incorporation of the town and establishment of a legal entity of local government were essential if other community needs were to be met to any significant degree. The community voted on the issue of incorporation in June 1970; it was defeated by a small margin. However advocates in the community are convinced incorporation is essential and they want to bring the issue to a vote again at a later time.

Citizen action committees continued their efforts through much of 1970 to find ways to meet community needs, to establish better communication with the Anaconda Company, to acquire land and additional funds for educational facilities, and to determine public opinion regarding present local planning efforts and priorities. Meanwhile, "The Lincoln Planning Group" at Montana State University was engaged in gathering more data, and in formulating and analyzing proposals for development of the area. This report is a presentation of the new data and of student and faculty

School of Architecture, Montana State University, Bozeman, Montana.

²Group of Lincoln citizens interested in and responsible for coordination of community activity generated by the Charrette.



thinking on the problem of comprehensive planning as recorded after many meetings with the people from the Lincoln Community, and with officials of the State Department of Planning and Economic Development.

comprehensive planning



Chapter II

COMPREHENSIVE PLANNING

Lincoln has experienced considerable annual growth and is expecting the development of an open pit copper mine and mill that could boost its population from 760 to as much as 4,500 in a relatively short time. If the community of Lincoln is to change positively, it must act to insure that future change will be in the direction desired; it must act to sustain beneficial growth and to maintain a quality of life consistent with the goals of its citizens. Lincoln is noted for its scenic beauty and wilderness atmosphere. If the Lincoln community wants to retain a quality environment, they must channel change into paths consistent with this goal and any other goals they might desire. The experience of many communities that have failed to act on their own behalf is unbalanced development with a lack of necessary services, and uncontrolled growth which despoils existing amenities.

Comprehensive planning is a process of making well informed predictions, and on the basis of these predictions, suggesting directions for the development of a community or region. During the comprehensive planning process, data is gathered to accurately describe the present community situation, determine appropriate community goals, and estimate consequences of various alternative community decisions; plans and instruments of control for the environment can then be formulated. In this way, change can be planned. A comprehensive plan must consider the sound development of all the physical elements that influence the community. The term "comprehensive" implies that as many relevant factors as possible are considered, and decisions are made based on the interrelationships of these facotrs. Decisions cannot be made without taking account of their potential impact on other dimensions of the community. In the past, many community problems have arisen because decision-makers have ignored these interrelationships; the very solution to one problem

^{3&}lt;sub>See pp. 48-53</sub>.

has compounded other problems, and in some cases created new problems. A comprehensive plan must also be a generalized study, or a flexible instrument which can accommodate new or unforseen conditions and circumstances; therefore to preserve its utility, it must be subjected to periodic revision and re-evaluation.

The goal of the Lincoln Planning Group at Montana State University was to suggest a direction for planning the future of Lincoln. This document should serve as a basis for further effort in the process of solving the problems of the Lincoln Valley.

inventories and investigations



Chapter III

INVENTORIES AND INVESTIGATIONS

Existing Land Use

Much of the area of the Lincoln-Blackfoot Valley watershed is covered with forest. There has been increased timber cutting since the construction of Highway 200, and there are many cut over and clear cut areas which, in another 100 years or more, may once again support fine stands of timber. Some natural meadows in the higher slopes of the mountains are good for game, but have limited value for grazing domestic animals. There are roughly 4,875 square miles in the Lincoln School District, of which the vast majority are covered with timber.

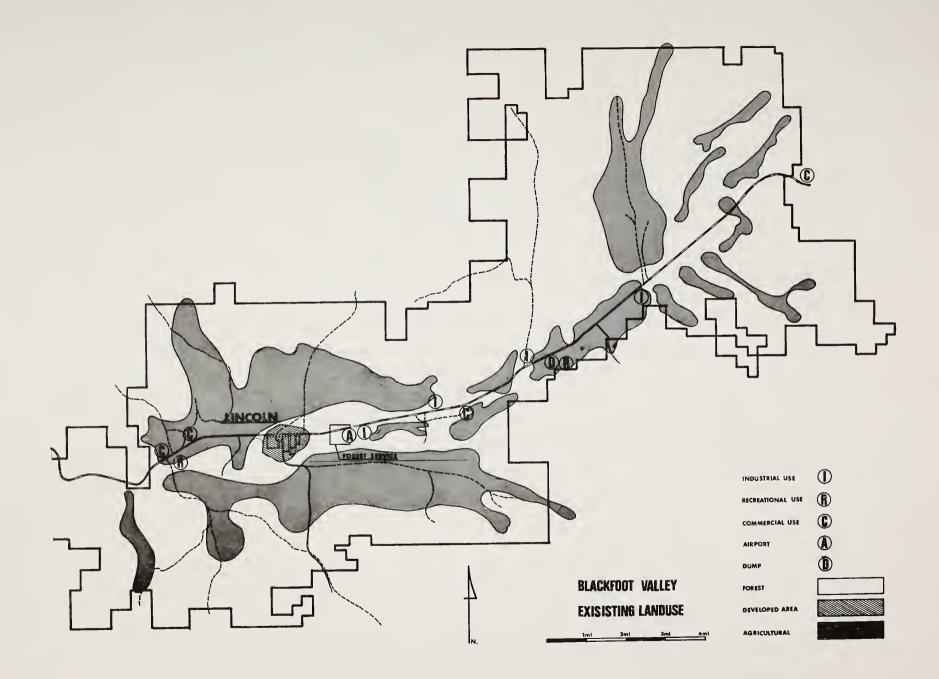
The attached land use map indicates a few existing conditions which may affect planning decisions. For example, land to the north and west of the Lincoln townsite is presently used for agricultural purposes. The community may wish to limit growth of the townsite in this direction, thereby providing for continued agricultural usage of this land. Note also that the dump is located near highway 200, Lander's Fork, and the Forest Service campground (marked "R"). The community may wish to relocate the dump in an area where aesthetic and recreational land uses are not likely to be affected by undesirable side effects (i.e. odor, unsightliness) of dump location.

Soils⁵

The soil map of the Lincoln Valley shows six main patterns of soils (known as soil

⁴ Lincoln Ranger Station, U. S. Forest Service.

D'Information adapted from "General Soil Map and Interpretations", Lincoln Valley, Lincoln, Montana, U. S. Department of Agriculture, Soil Conservation Service, 1970 - Art Olsen and Lamonte Bingham, Soil Scientists, S. C. S.

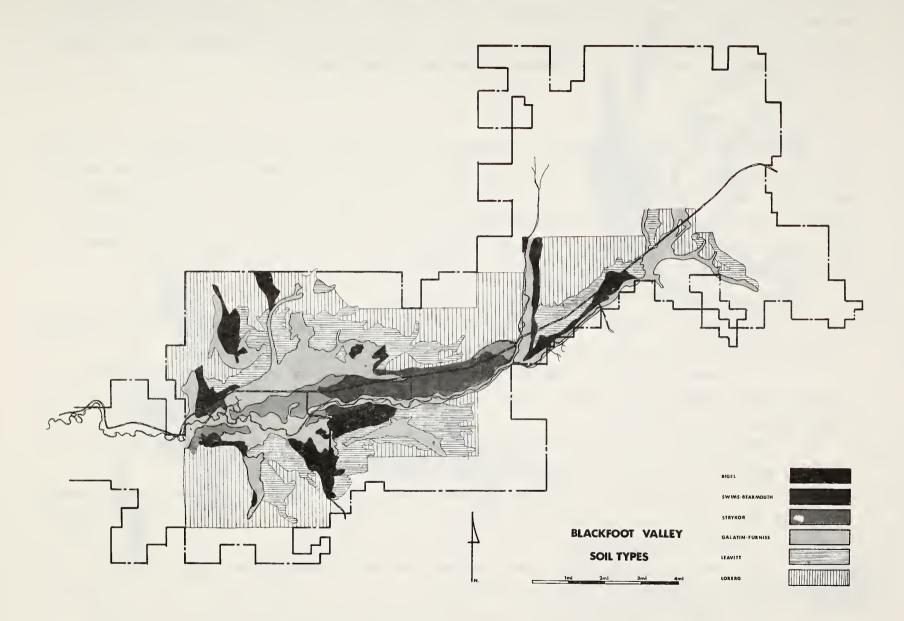


associations). This map provides: (1) a general idea of the soils, (2) comparison of different parts of the survey area, and (3) location of areas suitable for particular usage. For more detailed information appropriate to smaller land areas, one should consult "The Detailed Soil Survey" which is available from the Soil Conservation Service, Helena, Montana.

7 Symbols on the "Soil Types" map denote the following:

- 1. Bigel: Dominated by moderately deep, dark colored, well drained, gravelly, loam soils on gently sloping alluvial fans and terraces. (grassland)
- 2. Swims-Bearmouth: Dominated by deep, silty, moderately well drained and shallow, gravelly, well drained soils on nearly level to gently sloping intermediate stream terraces. (forested and some grassland)
- 3. Strykor: Dominated by deep, light colored, moderately well to somewhat poorly drained, silty soils on nearly level, intermediate stream terraces. (forested)
- 4. Galatin-Furniss: Dominated by loamy, dark colored, poorly to somewhat poorly drained soils, 30 to 60 inches deep, and gravelly soils on flood plains and low stream terraces subject to flooding. (grassland and forested)
- 5. Leavitt: Dominated by deep, dark colored, well drained, stony, loam soils on undulating to hilly glacial till uplands (grassland)
- 6. Loberg: Dominated by deep, light colored, well drained, clayey soils on hilly, glacial till uplands. (forested)

Each soil association contains one or more major soils and one or more minor soils in a pattern that is distinctive, although not entirely uniform. The general soil map does not show the kind of soil at any particular place, but rather an association of several different soils in a distinctive pattern. The soil associations are named for the major soil series in them, but soils of other series are also commonly present. The major soil series of one association may also be present in other associations but in a different pattern and proportion.



Slopes

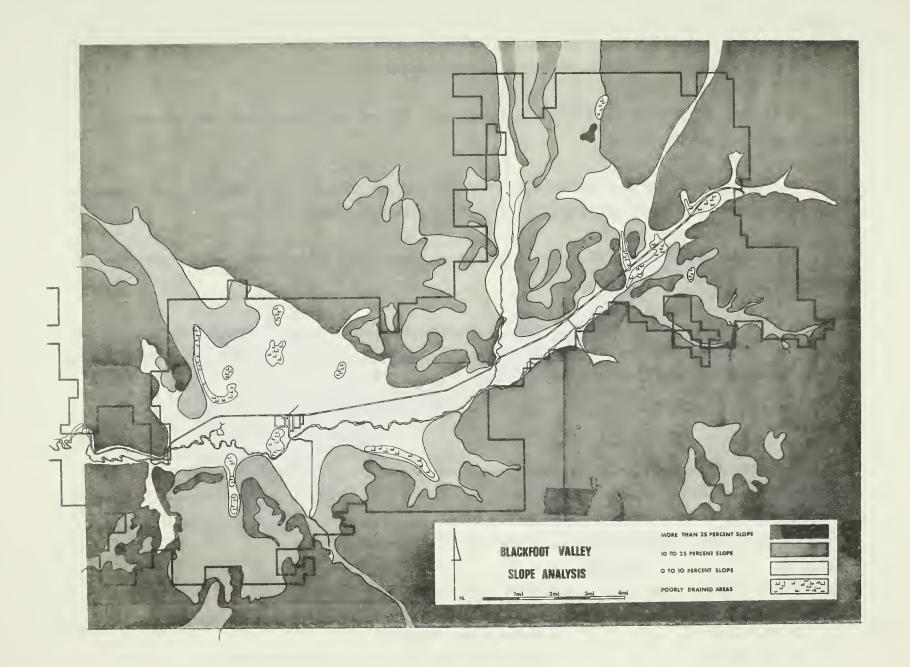
The slope analysis is based on the following assumptions:

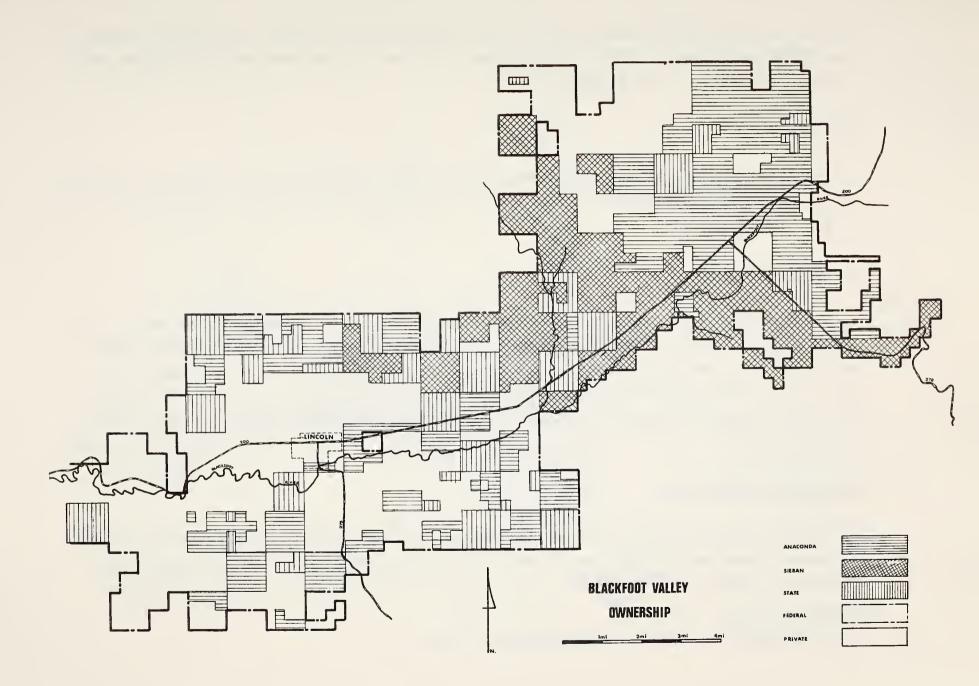
- 1. Areas of 25% slope or more are not desirable for ordinary development and are described in the darkest tone on the map.
- 2. Land between 10% and 25% slope is considered generally useful for some functions, such as low density housing. These areas are indicated by the medium tone on the map.
- 3. The land from 0% to 10% slope is considered optimum for development, and is shown on the map without tone.
- 4. The poorly drained areas may present problems of surface water accumulation; these areas may be quite desirable as building sites, but due to the lack of slope should be analyzed carefully before construction decisions are made.

Ownership

The attached ownership map indicates the major landowners in the Lincoln Valley area. The cooperation of certain landowners, especially the Anaconda Corporation and the state, will be very important to successful implementation of the plan. The area east of the Powell County Line and within the National Forest Boundary is owned by the following:

17	sq. miles	State of Montana
34	sq. miles	Anaconda Company
24	sq. miles	Sieben Ranch Company
55	sq. miles	Non-resident private and resident private





Much of the area along the highway east of town is controlled by the state, the Anaconda Company and the Sieben Ranch Company. West of town the land is divided into many small private holdings, many of which are owned by local residents.

Circulation

The Blackfoot Valley Traffic map indicates the traffic flow over the last four years as recorded by the Montana Highway Commission. The number of accidents that have occurred along the major routes is also shown.

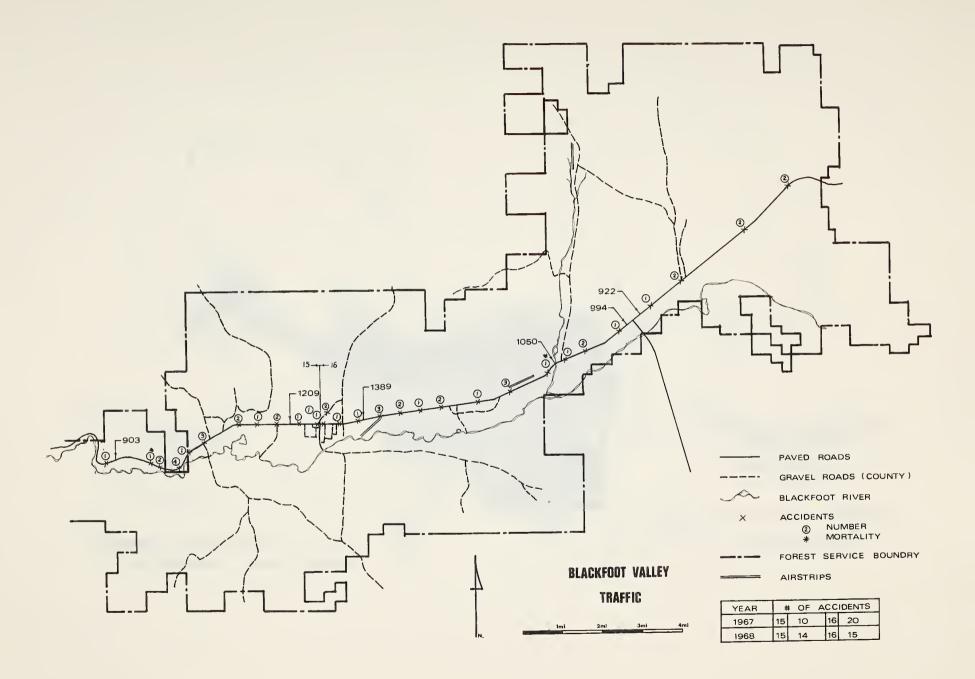
Suitability Studies

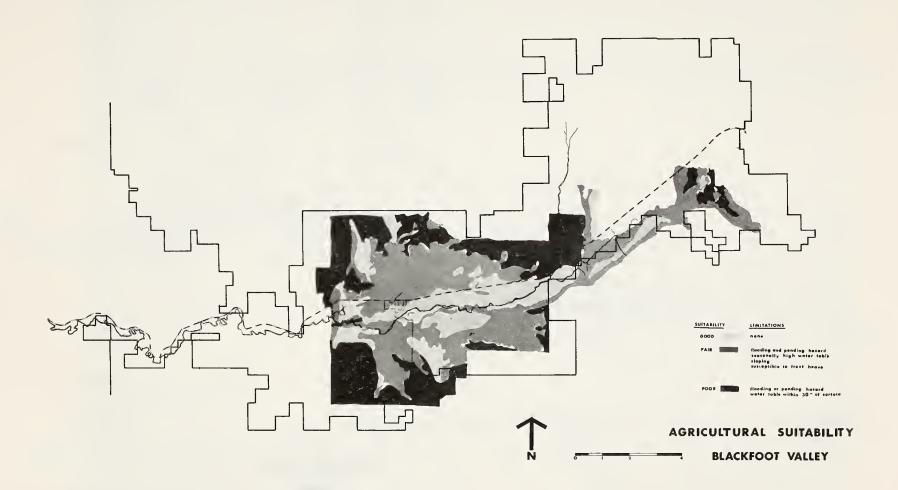
The Suitability Studies series is an evaluation of the land use potential of the Valley on the basis of certain criteria: soils, topography, and vegetative cover. Individual studies include agricultural use, capital development, circulation, and sewage treatment. The condition of the soils was a primary determinant of recommended land use as outlined in this report. In addition, the following series of maps was utilized in an attempt to evaluate the land in economic, physical, and human terms.

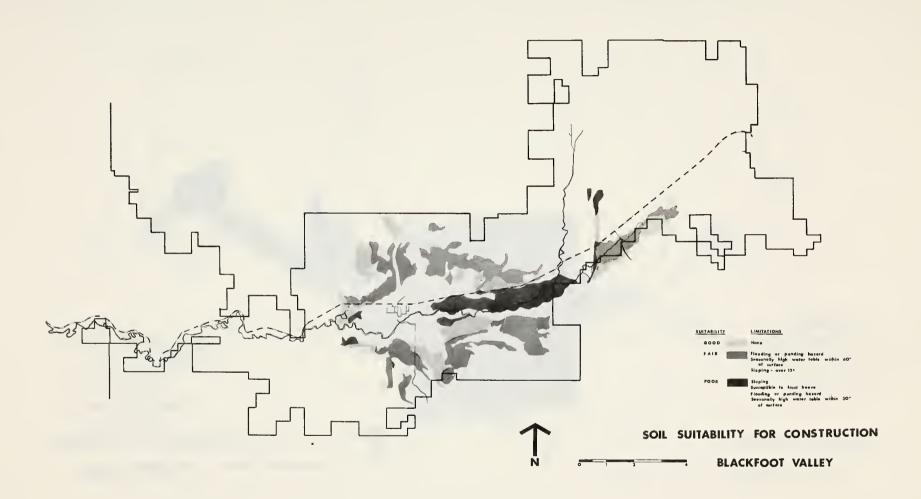
Social Value Inventories

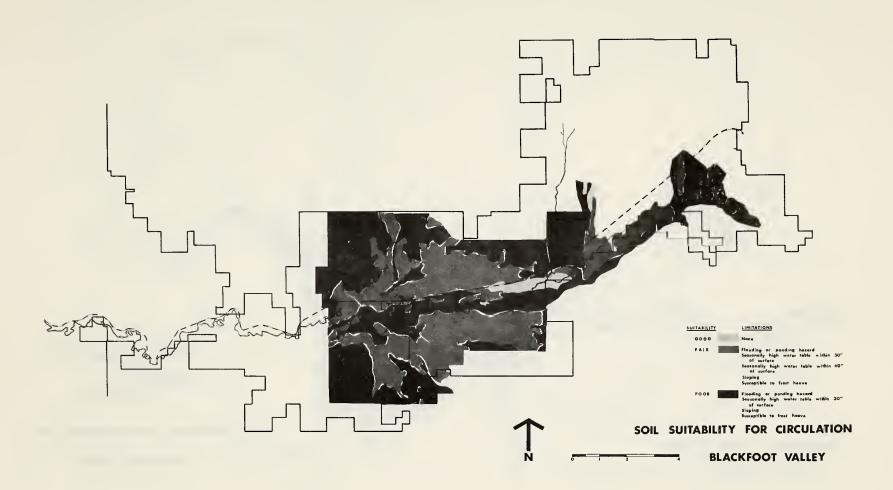
This analysis was initiated by personnel of the U. S. Forest Service; they developed the basic criteria for this series as well as all maps of the Upper Blackfoot Valley. The Lincoln Planning Group, with considerable assistance from members of the Forest Service and a number of Lincoln

⁸ See Soil Conservation Service "General Soil Map", p. 16.











residents, is responsible for the Lower Valley Maps.

The social value inventories are founded on the concept that although we have some means of evaluating certain factors in planning (for example, land values as determined by agricultural or forest productivity, or the relative costs of developing different kinds of terrain), we need to be able to evaluate qualities other than those of immediate economic concern. What is the value of a beautiful grove of trees along a clear river? Certainly it is more than the value of the lumber in those trees! The trees have immediate value to man, in terms of aesthetic qualities, in protection from wind and sun provided to campers and picnickers, in controlling erosion and preserving ground water, and in the protection provided fish hiding in their river-washed roots or the wildlife sleeping under their branches.

Each map attempts to show the relation of a particular aspect of the natural environment to the people of Lincoln. Each subject or social value has been stratified into three levels: high, intermediate, and low. No attempt is made to place a higher weighted value on any one of the eight subjects, since each may be used in different combinations for different purposes. For example, water values are not placed in competition with recreation values, nor is any attempt made to balance the value of a unit of wildlife against the value of a unit of forage. Each of the subjects inventoried is shown on an accompanying map; finally a composite overlay map has been developed, depicting those areas encompassing the greatest aggregate of social value according to the criteria listed below. Dark tonal shades depict high values, intermediate tonal shades indicate intermediate values, and the low values are shown in a clear tone on the accompanying maps. Those areas with the highest aggregate of values therefore appear on the maps in the darkest tonal shades. The first series of maps covers the upper valley from Lander's Fork to the Continental Divide, while the second series covers the lower valley from the Powell County

⁹Based on the concept originally developed by Ian McHarg, in <u>Design with Nature</u>, Natural History Press, 1969.

Line to Lander's Fork.

<u>Historic</u>. Areas where events of well-known historic interest have taken place, and which provide an historical background for the Upper Blackfoot, will be treated as having historic value.

A. High Historic Value

- 1. Definable points or areas that are described in historical documents, such as the Journals of Lewis and Clark.
- 2. The areas exist today and are still recognizable. For example, the spot where Captain Lewis crossed the Continental Divide has high historic value.

B. Intermediate Historic Value

- 1. General areas as described in historical documents.
- 2. Places more locally known. The trail used by Captain Lewis is an example of an intermediate historic value.

C. Low Historic Value

- 1. Broad areas of a general historical nature.
- 2. Absence of known historical elements.

<u>Water</u>. The utility of water for human purposes is the primary criterion employed to determine water values (i.e., as man sees, senses, and uses water).

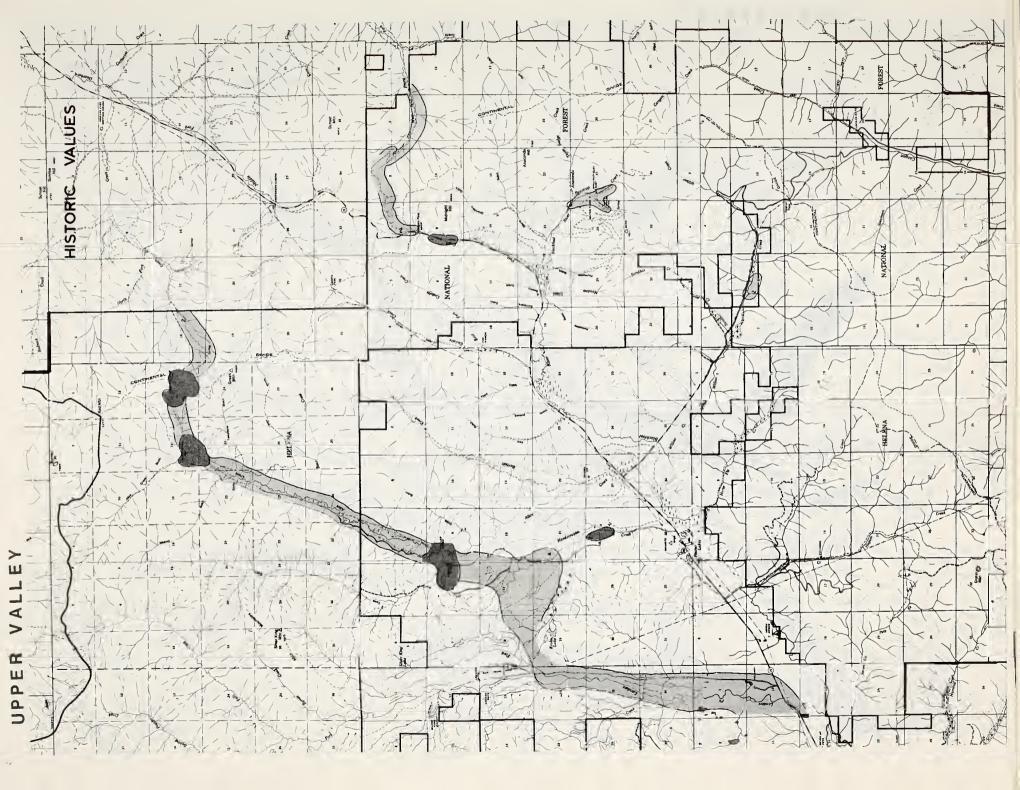
A. High Water Values

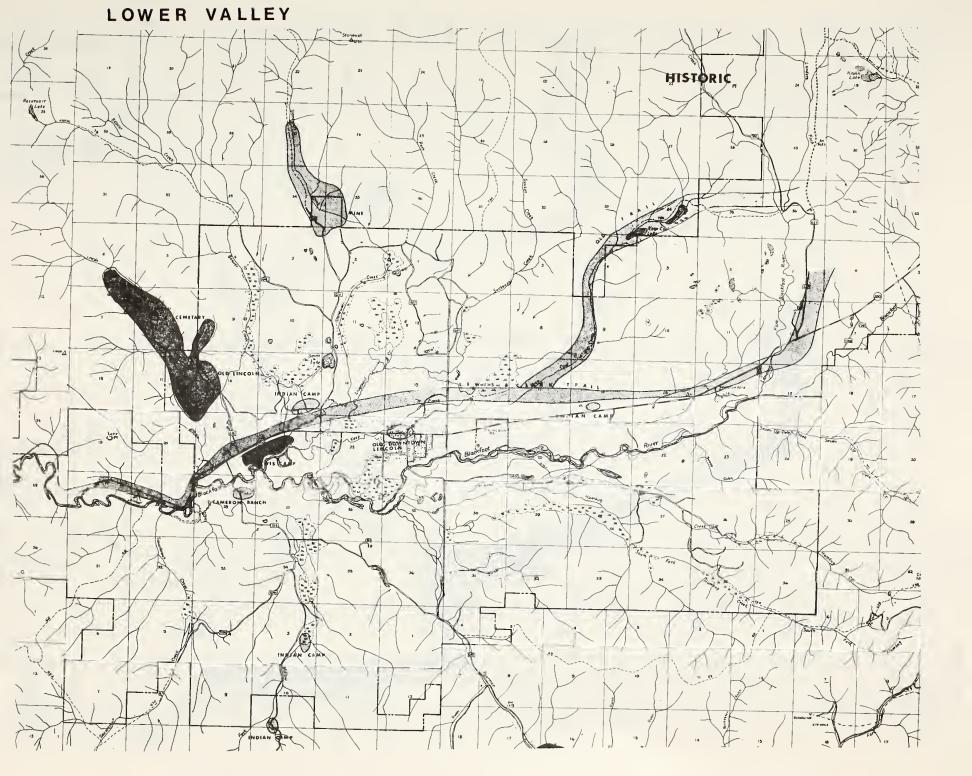
1. Visible water - lakes, ponds, and streams readily visible to man.

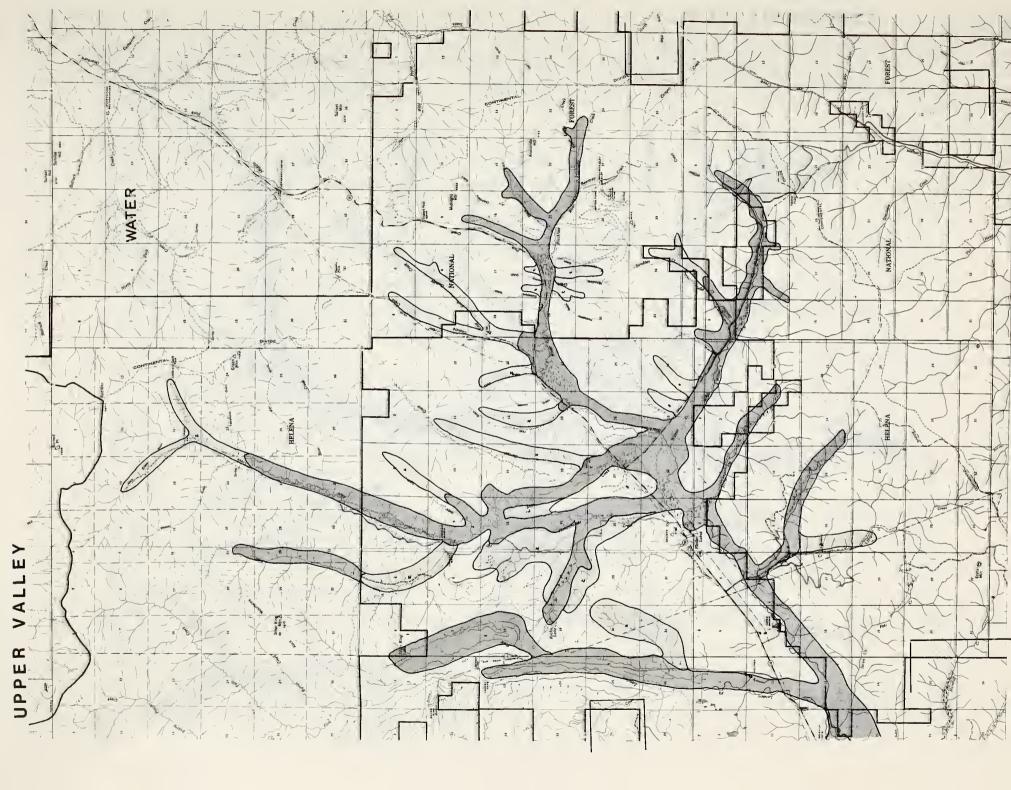
B. <u>Intermediate Water Values</u>

1. Water bearing strata or land aquifers.









2. Areas where high ground water table exists and where water is known to man through vegetative indicators, such as aspens and willows.

C. Low Water Values

- 1. The remaining land area where water is not visible to man.
- 2. That area which receives water only in the form of precipitation.

Lakes and ponds have been recognized as water storage areas that play an important role in periods of high water flow. Aquifers which store water, as well as play an important role in the interchange of ground to surface water, are similarly recognized. The lowest values were placed on areas that do not contain water in its most recognizable form. A somewhat conservative attitude was taken in determination of intermediate water values however.

<u>Fishery</u>. The water courses and influencing adjacent areas are considered of fishery value if they support fish. Habitat criteria were determined by quality and quantity of water, spawning areas, and riparian vegetation. This value was not tied to any one fish species, but to all species indigenous to the streams of the area.

A. High Fishery Values

- 1. Natural habitat natural reproduction.
- 2. Water courses having high quality habitat, and inhabited by fish.

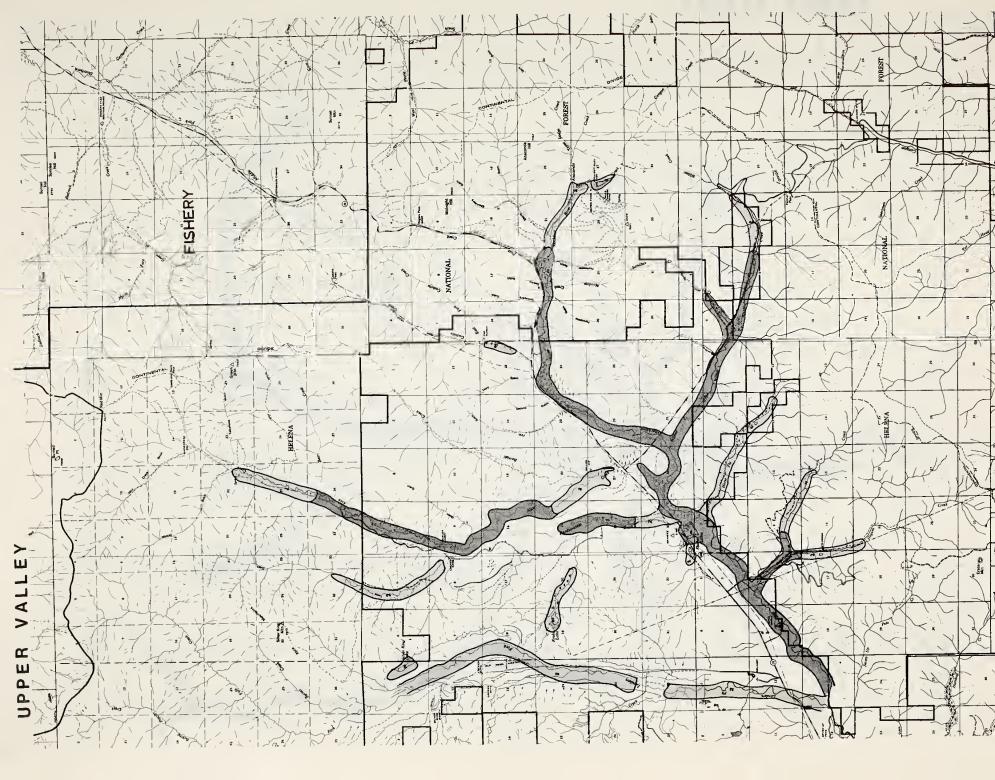
B. Intermediate Fishery Values

1. Streams with or without fish, but in need of habitat improvement.

C. Low Fishery Values

- 1. Dry or intermittently dry stream courses.
- 2. Land area with no fisheries.
- 3. No fish no habitat.

	,		



LOWER VALLEY



Forest. This value is determined by the number of trees and the cover they provide, as well as the aesthetic feeling people have demonstrated for forest covered land areas.

A. High Forest Values

- 1. Close to water courses, and easily seen and viewed by people.
- 2. Areas where the forest has great recreational or scenic importance to man. For example, areas like the flood plain of the Blackfoot River have many large and beautiful trees which people can enjoy.

B. Intermediate Forest Values

- 1. All other tree covered lands.
- 2. Areas which are used by man, but to a lesser degree than the high value forest.

C. Low Forest Values

1. Unforested lands or areas with low density tree cover.

Forage and Agriculture. This value is determined by the quality of open area scenery, as depicted by mountain grasslands, meadows, and parks. Suitability of an area for grazing domestic livestock (cattle and sheep) is also considered.

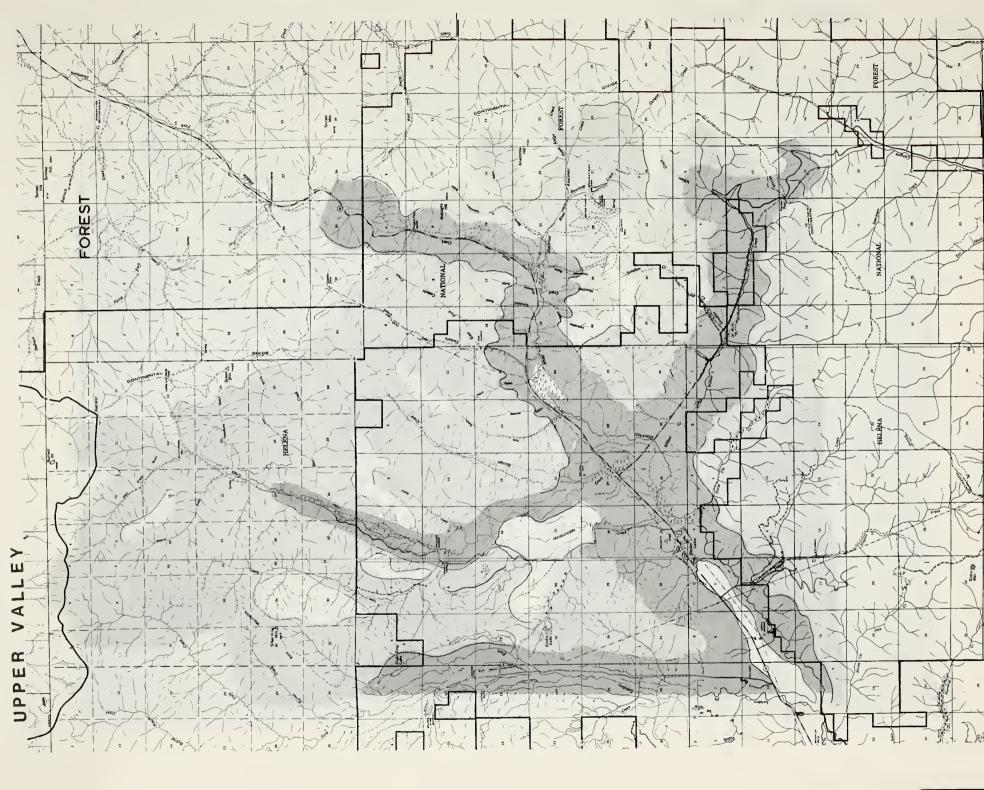
A. High Forage Values

- 1. Open areas of great scenic beauty (parklike).
- 2. Areas preferred by livestock, such as gentle slopes with good pasture.

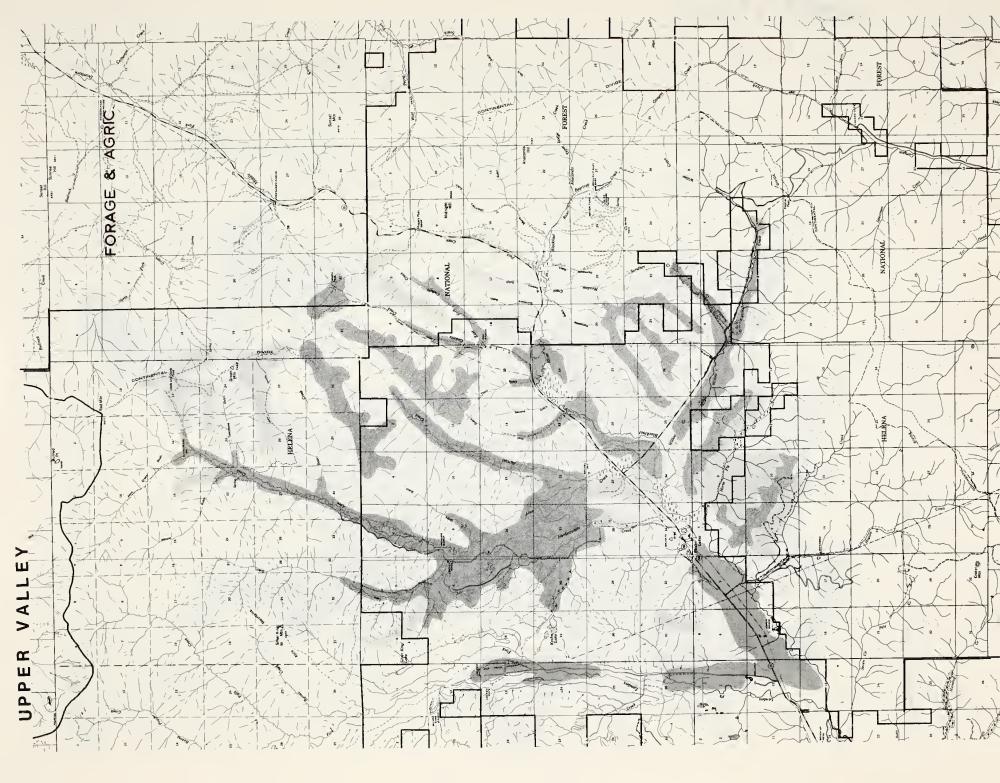
B. Intermediate Forage Values

1. Areas having some grass flora but increased tree cover, and not providing the same scenic beauty of the open areas.

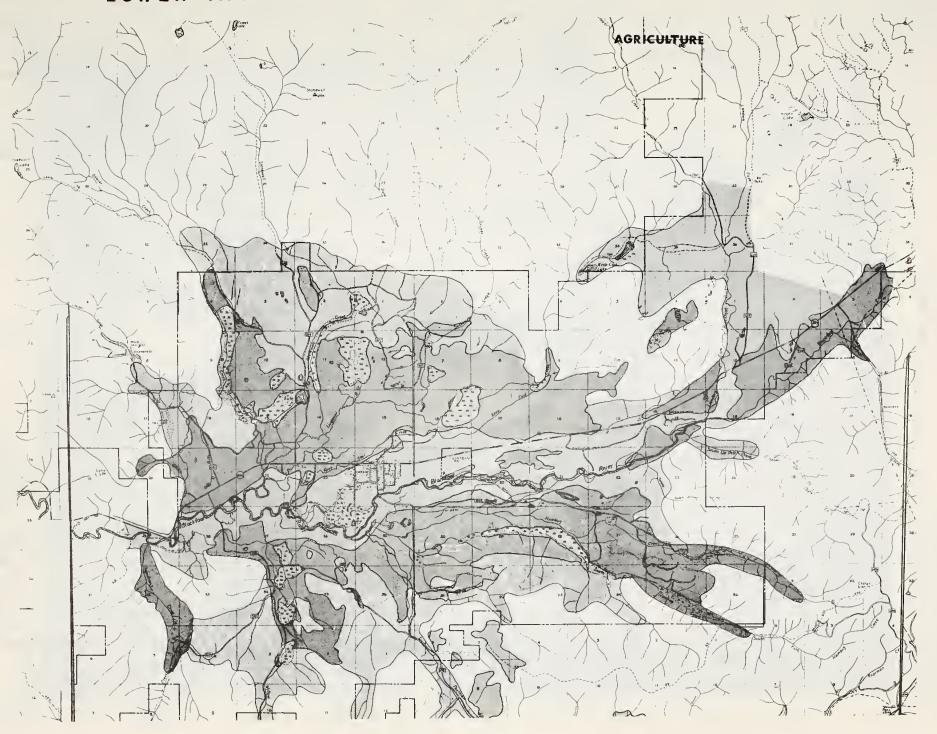








LOWER VALLEY



- 2. Secondary range for livestock ("used, but not preferred"),
- 3. Areas with steeper ground, or less accessible to water.

C. Low Forage Values

- 1. Tree covered land not providing any open area beauty.
- 2. Unuseable for livestock due to steeper slopes and poor forage.

<u>Wildlife</u>. The wildlife values are determined by the presence of elk, deer, and beaver in an area. The beaver has been included because: (1) his habitat appears to be more unique due to dependency on water courses, (2) and he is more representative of the Upper Blackfoot Valley than other small game animals.

A. High Wildlife Values

- 1. Key winter game range that area of major importance to the survival of elk and deer during winter, their most critical time.
- 2. Calving areas the habitat selected by big game animals for reproduction.
- 3. Areas where sufficient food and water are present to enable beaver to exist.

B. Intermediate Wildlife Values

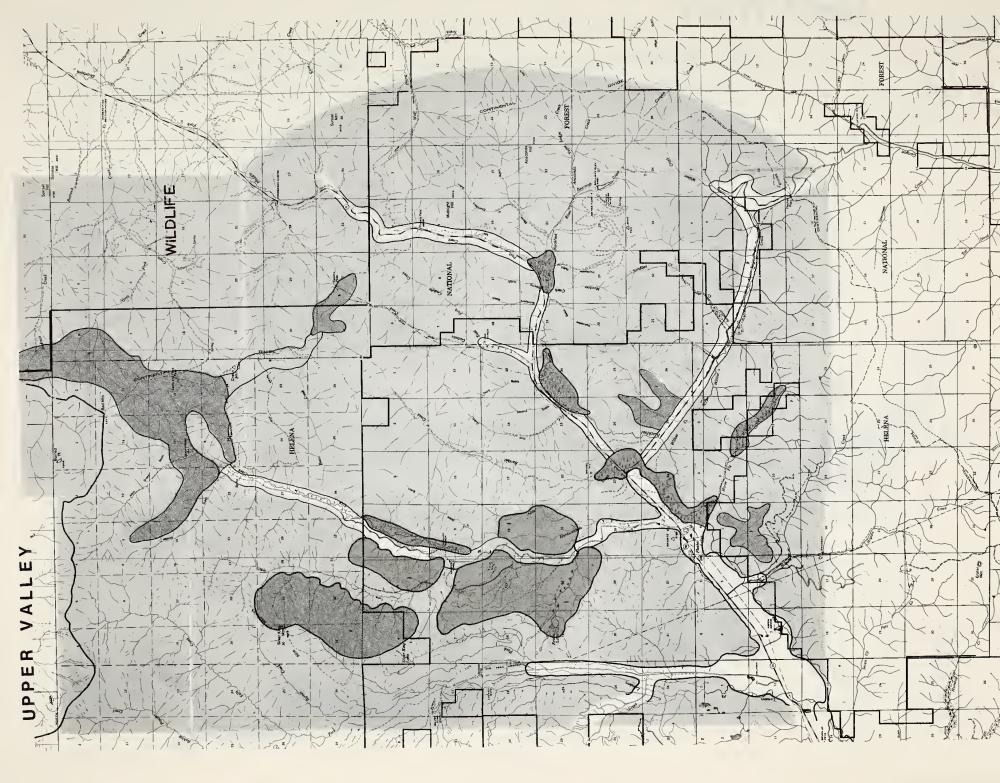
1. Summer range for elk and deer, and year-long range for most animals.

C. Low Wildlife Values

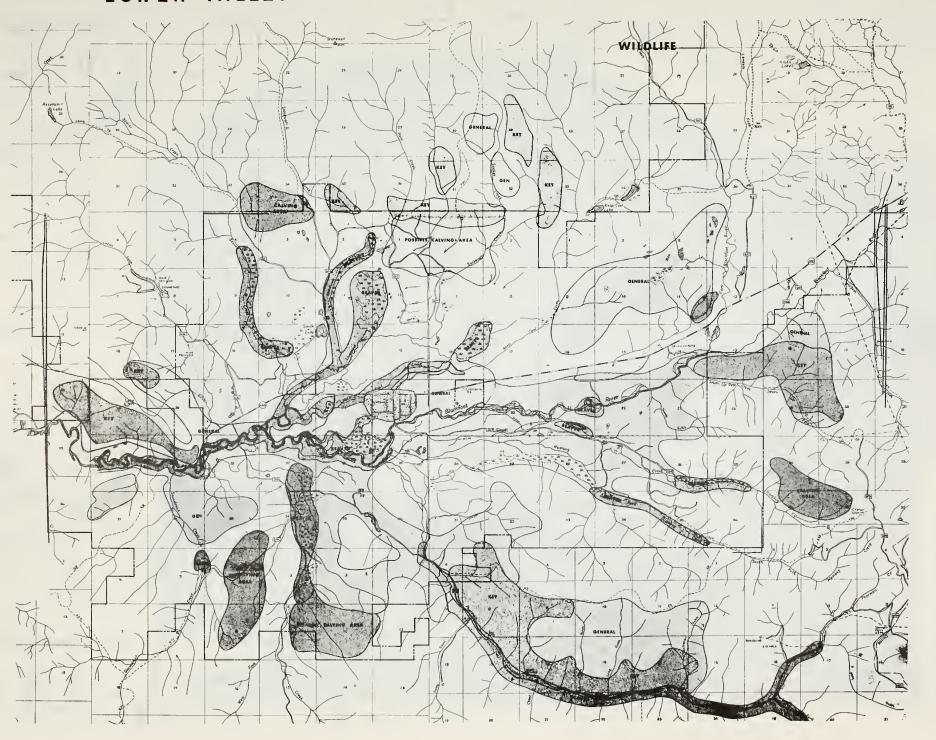
- 1. Areas usually occupied by man, such as urbanized areas, highways, and residences.
- 2 Sterile areas, where no forage exists.

Endangered species, such as eagles, ospreys, and grizzly bears, have not been included because of difficulty in accurately pinpointing their geographic location.





LOWER VALLEY



Scenic. Areas of scenic value normally must be viewed to be enjoyed. Scenic value is determined by the aesthetic quality attributed by man to areas of natural beauty.

A. High Scenic Values

- 1. Aesthetically pleasing views adjacent to highly traveled routes. Examples might include a tree covered slope, a natural opening in the forest, or a water course.
- 2. Natural scenic elements, such as the Continental Divide.

B. Intermediate Scenic Values

- 1. Views that are more distant from the viewer, or that are less distinct to the viewer than those of high scenic value.
- 2. Particularly scenic areas infrequently viewed by the general public due to the difficulty involved in getting to them.

C. Low Scenic Values

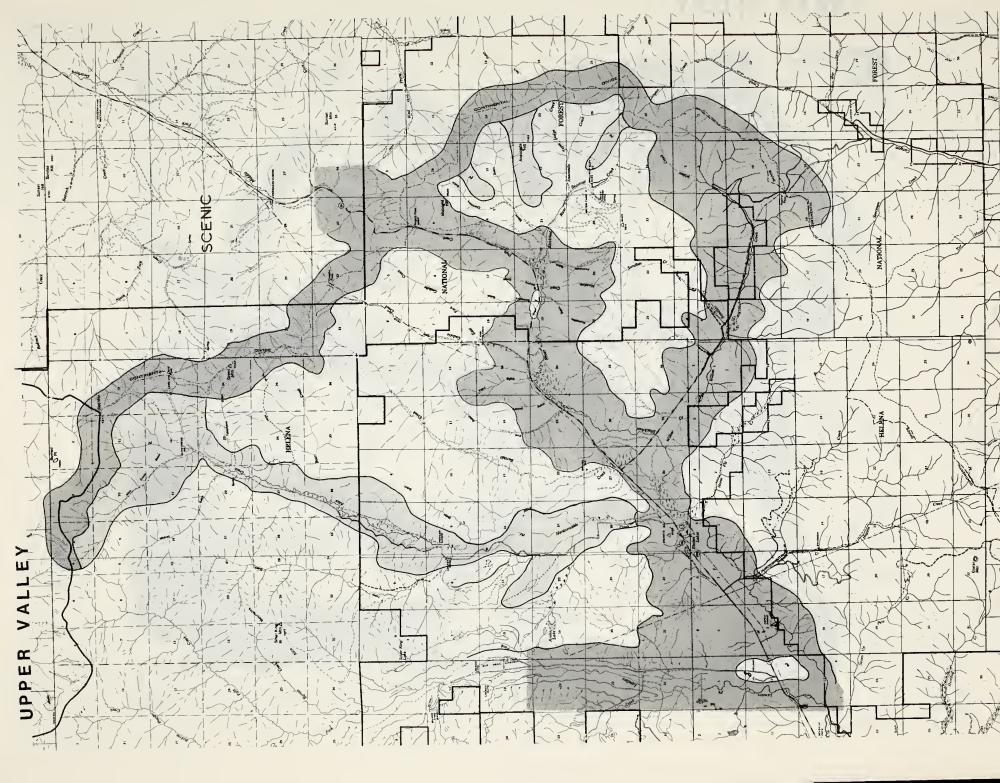
- 1. Generally scenery or areas that people do not see from the roads.
- 2. Unattractive areas such as dumps, urbanized or industrial areas.

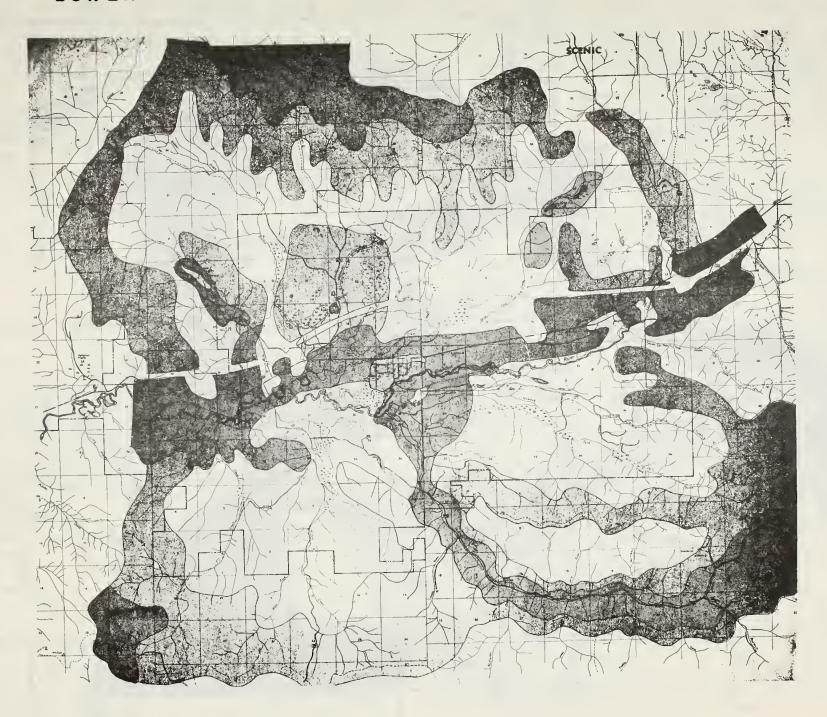
Recreation. The availability of water and the presence of large trees for shade and wind-breaks, and flat land for campsites enhances any potential recreation area; these factors were considered in determining recreation values.

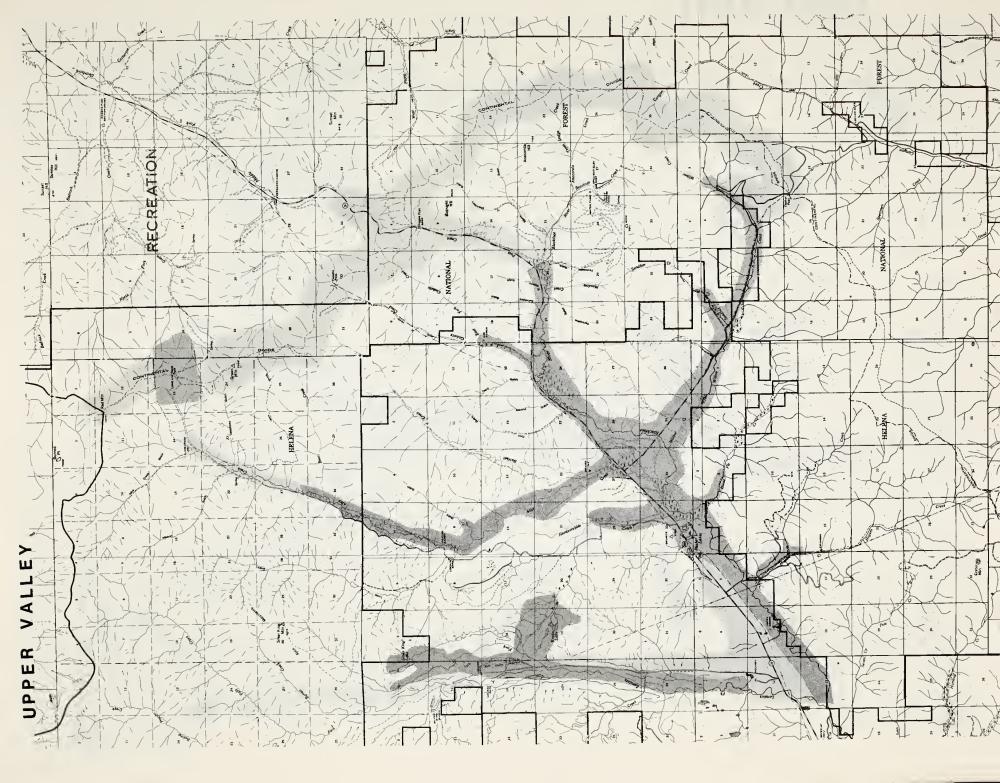
A. High Recreation Values

- 1. Existing, or improved recreation sites or areas of high potential for site development.
- 2. Near water and easily accessible from the highway.









B. Intermediate Recreation Value

- 1. Underdeveloped, but still possessing some good characteristics for recreational use.
- 2. More removed from water and less accessible from the highway.

C. Low Recreation Values

1. Land characteristics not suitable for development because of slope, lack of water, or exposed location.

Composite Social Values Map. The attached map (see p. 43) shows the eight values superimposed on a composite overlay. The darker tonal shades on the overlay indicate areas where aggregates of values occur, and which have high social value as determined by these criteria.

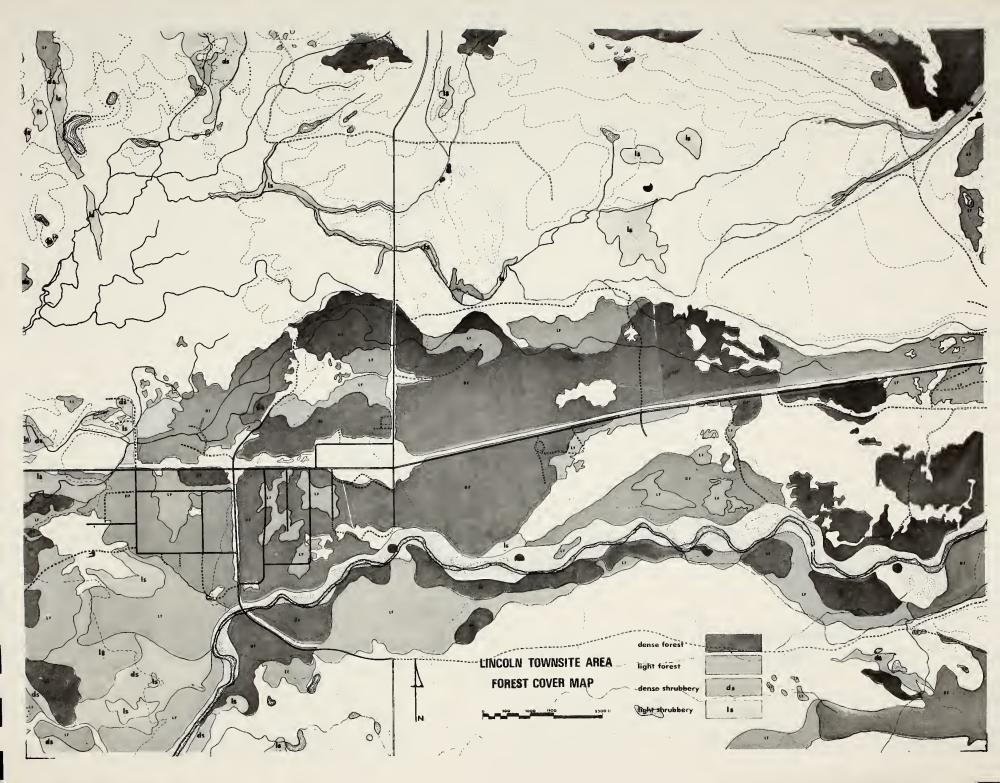
Using the composite overlay, one can:

- 1. View the location and impact of any change in land use.
- 2. Start evaluating the land areas, and determining the necessity of further investigation and study.
- 3. Start selecting alternatives for land use and determining what kind of studies are required to evaluate these alternatives.

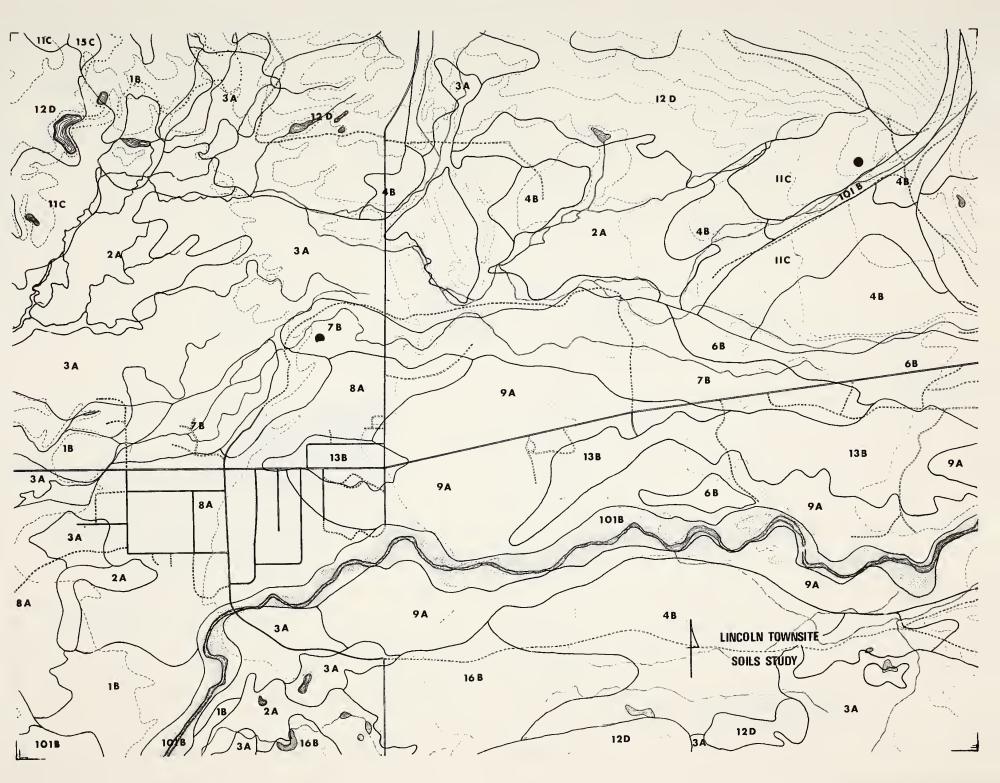
Townsite Area Study

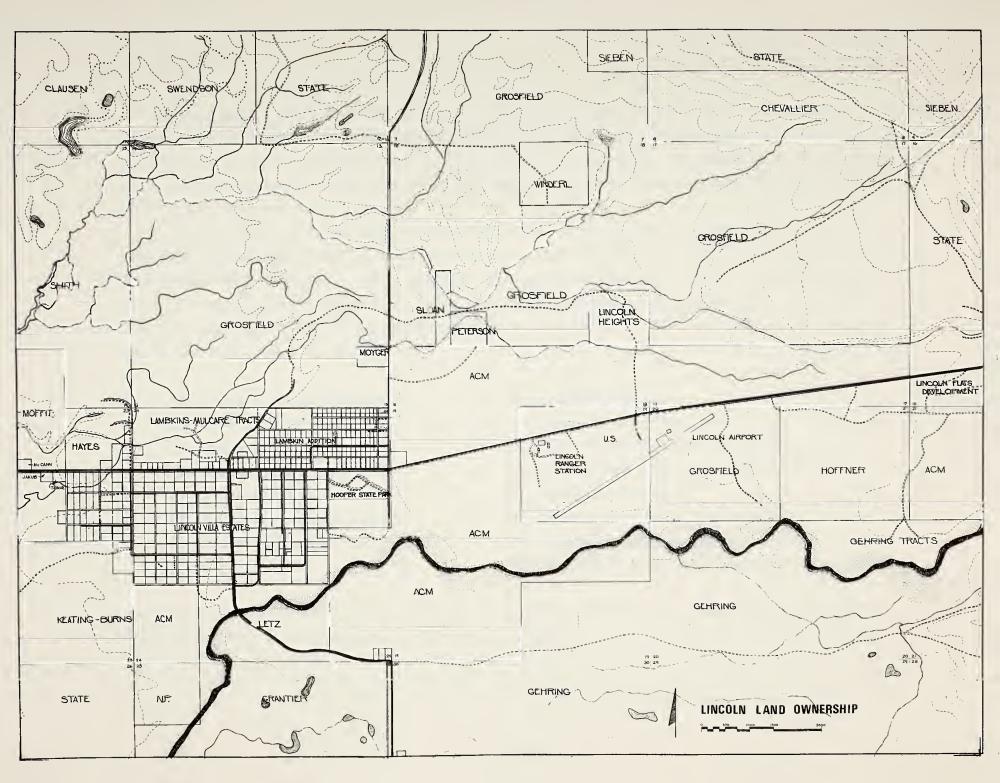
The townsite area study is a detailed version of the general physical inventories presented earlier in this report. (See pp. 13-20) In addition to the topography and physical features shown on the following map, the townsite study took into consideration vegetative cover, soils and













ownership. 10

River Study. One of the most important factors in successful development and expansion of the present Lincoln townsite is consideration of the flood problem. Although complete records are not available, information gathered from local residents is disturbing. It appears that the (average) fifty year flood reaches parts of Highway 200 and the ten year floods may back up the smaller

The base area of these maps extends $\frac{1}{4}$ mile west of Lincoln to 2 miles east of Lincoln. The base map data was made from interim prints, scale 1:24,000, obtained from the United States Geological Survey in Denver. The vegetative cover map was drawn from aerial photographs taken by the U. S. Army Corps of Engineers in 1964. The soils information was obtained from the marked aerial photographs of the Soil Conservation Service, processed in 1964 and 1965. Following is a key to the soils classifications:

1B Cryaquolls and Cryaquep	quepts
----------------------------	--------

101B Gravelly Alluvial Land

2A Furness Silty Clay Loam

3A Gallatin Silt Loam

4B Bigel Gravelly Loam

6B Bearmouth - Swims Complex

7B Bearmouth Loams - Wet

8A Stryker Silt Loam

9A Swims Silt Loam

11C Leavitt Cobbly Loam, Undulating

12D Leavitt and Bigel Stony Loams, Hilly

13B Maxville Silt Loam

15C Loberg Stony Loam, Undulating

15E Loberg Stony Loam, Hilly

16B Bigel Gravelly Loam, Noncalcareous Substratum

Ownership information was obtained from the County Detailed Subdivision and Ownership Map, June 1969, with corrections by members of the Lincoln Community.

streams, like Keep Cool Creek, causing problems for some existing homes; in addition, the ten year floods may affect residences near the river along the southern edge of town.

Several authorities have commented on the difficulty of providing effective flood control on an unstable stream like the Blackfoot. Any attempt at damming would cause great ecological disturbance and might be quickly frustrated by a build-up of material carried by the river. The typical levee on a river like the Blackfoot is likely to raise the actual level of the river bed and, rather than control flooding, it can increase the danger of a serious flood. It is clear that a competent study is needed. Some members of the community have asked the Water Resources Board and the U. S. Corps of Engineers for a flood control study of Lander's Fork. Other sources of help should be investigated as well.

Population

Accurate population data for Lincoln over the past ten years is difficult to obtain because, as an unincorporated community, decennial census data is available only for the census tract. The present Lincoln population (spring 1970) is estimated at 483 within the proposed incorporated town with an additional 275 people outside those limits; this gives a total population of the Lincoln area of 758. In comparison, the 1960 U. S. Census counted 593 persons within the boundaries of the census tract. Other growth indicators, such as number of utility customers, school census, traffic flow and recreation visits are shown on the following table.

These figures have been taken from the 1970 census field notes and include all of School District 38, or roughly the area between the Continental Divide and the Powell County Line.

TABLE I

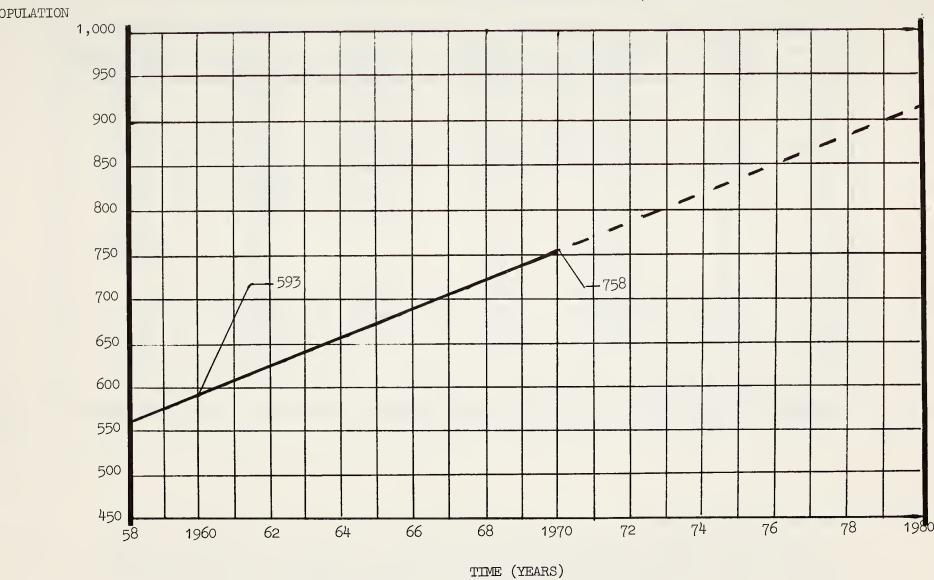
DESCRIPTIVE VARIABLES USED IN TREND ANALYSES-LINCOLN, MONTANA 12

Year	Traffic Flow	Recreation Visits	Phone Customers	Power Customers	Population	School Census Ages 0 - 21
1958	747	18,980	106	334	560*	
1959	764	23,500	110	356	576 *	240
1960	900	30,125	130	389	593	293
1961	898	31,775	151	424	610*	253
1962	963	34,400	159	437	626*	273
1963	1,092	44,100	174	453	642 *	254
1964	1,020	45,000	192	471	659*	234
1965	1,241	82,300	233	505	676*	254
1966	1,265	101,800	259	542	692*	263
1967	1,275	101,100	308	582	708 *	264
1968	1,408	116,200	324	581	725*	292
1969	,				742 *	265
1970					758	

*Estimated

¹² The Montana Highway Department provided information on traffic flow, statistics on forest recreation visits were obtained from the U. S. Forest Service, information on phone customers from Mountain Bell, and statistics on power customers from the Montana Power Company.

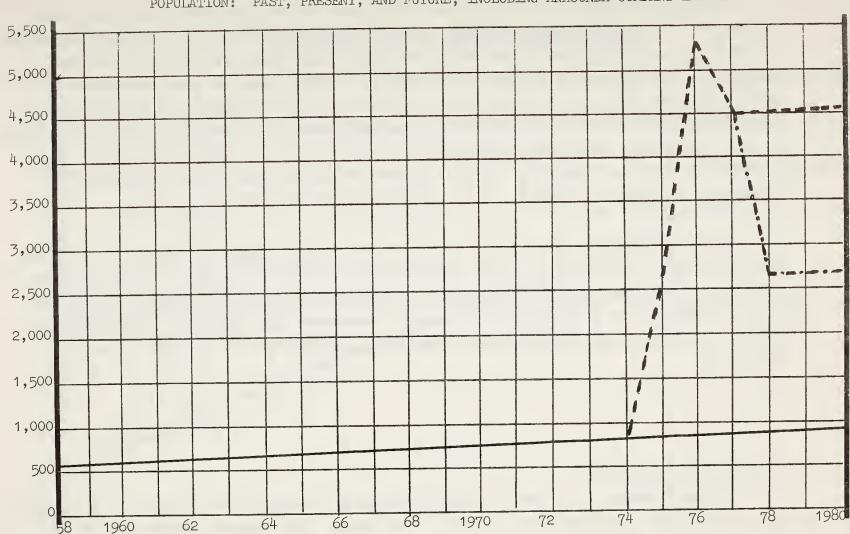
POPULATION: PAST AND FUTURE - LINCOLN, MONTANA



The projected growth of the Lincoln population over the next ten years is based on linear regression. These projections are based on the following assumptions: (1) The Anaconda Company estimate (in early 1970) that copper mining development might range from 250 to 500 permanent employees. (2) Construction will take three years, involving a peak of 1,000 employees. (3) Construction may begin in 1975, although it could begin much earlier than that or not at all. (4) Family size of Anaconda employees will average approximately 4.0 persons. (5) One to one ratio of base employees to service employees with 3.3 persons per service family; although the present base-service ratio for Lincoln is 1:.8 and the ratio for mining communities is typically low, recreational or other development of the area would tend to raise the service ratio.

Projected populations for Lincoln in 1980 include the following possibilities: (1) with no ACM development, 923 people; (2) if the Anaconda Company employs 250 persons, 2,750 people; and (3) if the Anaconda Company employs 500 persons, 4,573 people. These projections take into account no other change in the Lincoln economy; it must be recognized that the limited data base and the general character of the economy and employment does not lend itself to reliable population projections.

¹³ Linear regression is a method of predicting change by assuming some constant rate of change that has occurred in the past will continue in the future. For example, between 1960 and 1970, the U. S. Census indicated that Lincoln's population increased an average of 16.5 persons per year. Using a linear regression, Lincoln would continue to grow at a rate of 16.5 persons per year. Computations were made by Jim Nybo, a graduate student in economics.



CURRENT TREND HIGH IMPACT LOW IMPACT

TABLE II

PROJECTED POPULATIONS IN LINCOLN 1970 - 1980

Lincol Popula		Low D Anaconda Employees & Families	Service Employees & Families	Total	Anaconda Employees & Families	Development Rate Service Employees & Families	Total
1970	758						
1971	774						
1972	791						
1973	806						
1974	824						-1
1975	840	1,600	200	2,640	1,600	200	2,640
1976	857	4,000	400	5,257	4,000	400	5,257
1977	874	2,800	825	4,499	2,800	825	4,499
1978	890	1,000	825	2,715	2,000	1,650	4,540
1979	906	1,000	825	2,731	2,000	1,650	4,556
1980	923	1,000	825	2,748	2,000	1,650	4,573

The overall population density of the Lincoln-Blackfoot River watershed is about one person per square mile. However, considering only the area outside the Helena National Forest (as described in the section on Land Ownership in the Blackfoot Valley) the density is closer to six persons per square mile.

The present age distribution of the Lincoln area population will probably change considerably. Assuming there will be more jobs for young adults and that Lincoln will acquire a high school, families with high school age children will be encouraged to settle and remain here. The population of Lincoln should then be much closer to the national average age distribution than it now is, and the community would probably want to provide relatively more services for young people than it now does.

Commercial Services

With a continuation of the increase of automobile traffic on Highway 200 and of recreation visits to the Blackfoot Valley, some areas of commercial activity (especially service stations, eating and drinking places, and hotels and lodging places) can clearly be expected to grow. Accurate predictions of future commercial needs for Lincoln are otherwise very difficult, however. In the case of Libby, Montana, the investigators found that almost no additional commercial services were established in response to the enormous population increase caused by construction of the dam. For the few years of development there, it apparently was not worthwhile. The moderate rise in commercial activity was met almost entirely by existing establishments.

In Lincoln, many citizens hope the Anaconda Company will demonstrate enough sense of permanence to encourage commercial entrepreneurs. Otherwise, the town will have to continue with inadequate commercial services until the natural growth of the area allows more.

¹⁴ For further information, please refer to the Commercial Section in "Lincoln Educational Facilities - 1969" (pp. 59-62).

TABLE III

COMMERCIAL ESTABLISHMENTS IN LINCOLN, MONTANA 15

S.I.C. No. 16	Name of Business Type	No. of Enterprises	Total Square Feet
20	Food and Kindred Products	1	NA
27	Printing and Publishing	1	600
42	Trucking and Warehousing	2	NA
49	Utilities - Gas, Oil, Electric	3	NA
52	Building Materials and Farm Equipment	1	4,200
53	Retail General Merchandise	2	5,110
54	Food Stores	1	3,960
55	Auto Dealers and Service Stations	7	9,480
58	Eating and Drinking Places	10	16,340
60	Banking	1	1,600
64	Insurance	2	NA
65	Real Estate	1	NA
70	Hotels and Lodging	11	25,950
72	Personal Service	5	NA
75	Car Wash	1	NA
48	Communications - Cable TV	1	NA
	Laundromat	2	2,300
	Liquor	1	600

Does not include primary industries such as saw and post mills, contractors and ranchers.

¹⁶ Standard Industrial Classification

NA - Not Available

TABLE IV

PRIMARY COMMERCIAL ESTABLISHMENTS - LINCOLN, MONTANA

Type of Business	Total Number
Hotels and Other Lodging Places	11
Eating and Drinking Places	9
Auto Dealers and Service Stations	7
Personal Service	5
Trucking and Warehousing	2
Insurance Agents, Brokers	2
Food and Kindred Products	1
Printing and Publishing	1
Building Material and Farm Equipment	1
Retail General Merchandise	1
Food Store	1
Banking	1
Real Estate	1

Economics 17

After analyzing the sketchy data available for the Lincoln economy, it appears that the "base-

¹⁷ Based on "A Comprehensive Analysis of the Lincoln Economy", by Jim Nybo, Montana State University graduate student in Economics.

service ratio" for Lincoln is one base employee for .8 service employees. The limited number of services attainable in Lincoln, and the small degree of interaction among sectors within the economy itself, account primarily for the small ratio of service to basic industry employees.

The following table gives an indication of the changes in the Lincoln labor market over the year. Not only does the unemployment rate vary seasonally, but the total number of available workers varies as well. During periods of job scarcity, part of the unemployed sector migrates out of the area. During the winter months, there is a greater rate of unemployment, and a smaller labor force. Obviously out-migration tends to reduce the total number of local unemployed workers.

Table VI is based on 1960 census figures, and is included to give some general indication of the spectrum of occupations in Lincoln. Since so much of the employment in Lincoln is of a seasonal nature, it is difficult to develop a meaningful analysis based on annual figures.

Currently, most of the commercial facilities serving Lincoln are grouped along Highway 200. The commercial establishments are geared toward serving local residents, as well as people who are passing through or visiting the Lincoln area. Due to the seasonality of tourism, some Lincoln firms close in the winter, while others provide local needs year around and service both segments during the busier summer season.

The United States Forest Service is the major government employer; eight people are employed year-round and an additional thirty are hired for summer employment. Some of the summer employees are students, or others from outside areas, so their income is not absorbed in its totality by the

¹⁸A base industry is one which produces goods for sale outside the area or in some other way brings money into the area from outside. A service industry provides for needs of the area population. A "base:service ratio" is computed as the ratio of service employees working to provide the needs of the basic industry employees.

TABLE V
ANNUAL LABOR PICTURE LINCOLN, MONTANA 19

Month	Labor Force	Number Unemployed	Percent Unemployed
January	178	11	5.97
February	169	9	5•33
March	179	10	5.54
April	210	11	5.13
May	215	12	5.47
June	214	8	3.83
July	260	9	3.39
August	229	9	3.74
September	202	7	3.25
October	180	5	2.66
November	191	9	4.79
December	189	7	3.89

¹⁹ Extrapolated from State Employment Security Commission data for 1966-67.

TABLE VI
OCCUPATIONAL DATA LINCOLN, MONTANA²⁰

Occupation	No. Employed in Occupation
Professional	27
Clerical and Sales	26
Craftsman	21
Operatives	33
- Household Workers	2
Service	22
Laborers	11
Farm	35
Not Reported	3

local economy.

In mid-February of 1970 approximately 40 people were employed by the Delaney Sawmill. The lumber industry, hard-hit by cutbacks in construction, is at present an unreliable source of revenue, and contributes to drastic fluctuations in the Lincoln economy. The Delaney mill has since closed and is apparently unlikely to resume operations. Many of the projections in this report are based on continuation of some lumbering activity, however.

²⁰ Furnished by the Billings Office of the Montana State Employment Service.

The linear regression technique (see p. 51) has been employed to make projections of traffic flow and recreation use of the forests (see Table VII).

TABLE VII

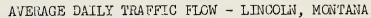
PROJECTED FOREST RECREATION USE AND TRAFFIC FLOW - LINCOLN, MONTANA 21

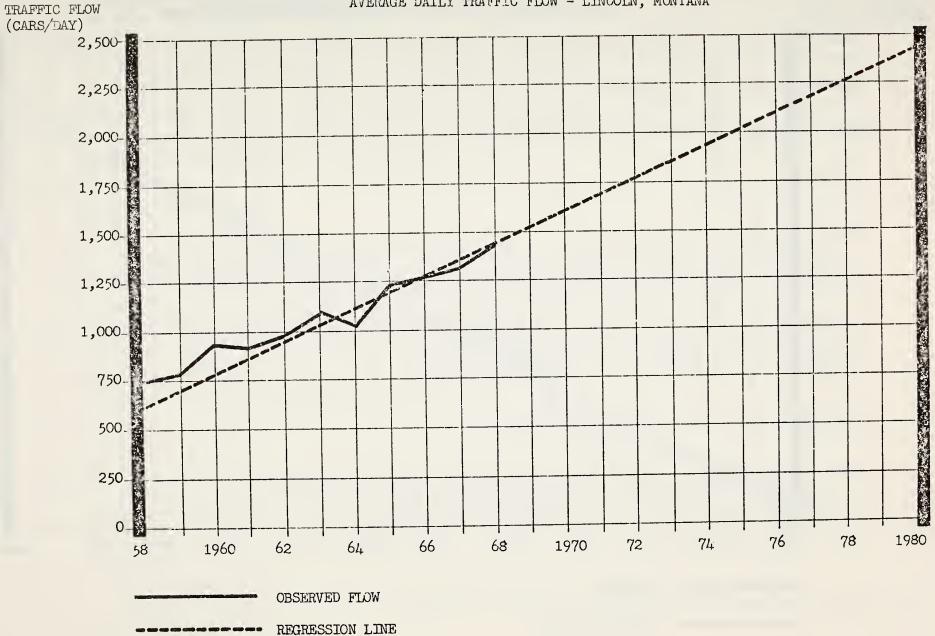
Year	Forest Visitor-Days	Average Daily Traffic Flow
1970	169,607	1,599
1975	267,177	2,004
1980	364,748	2,409

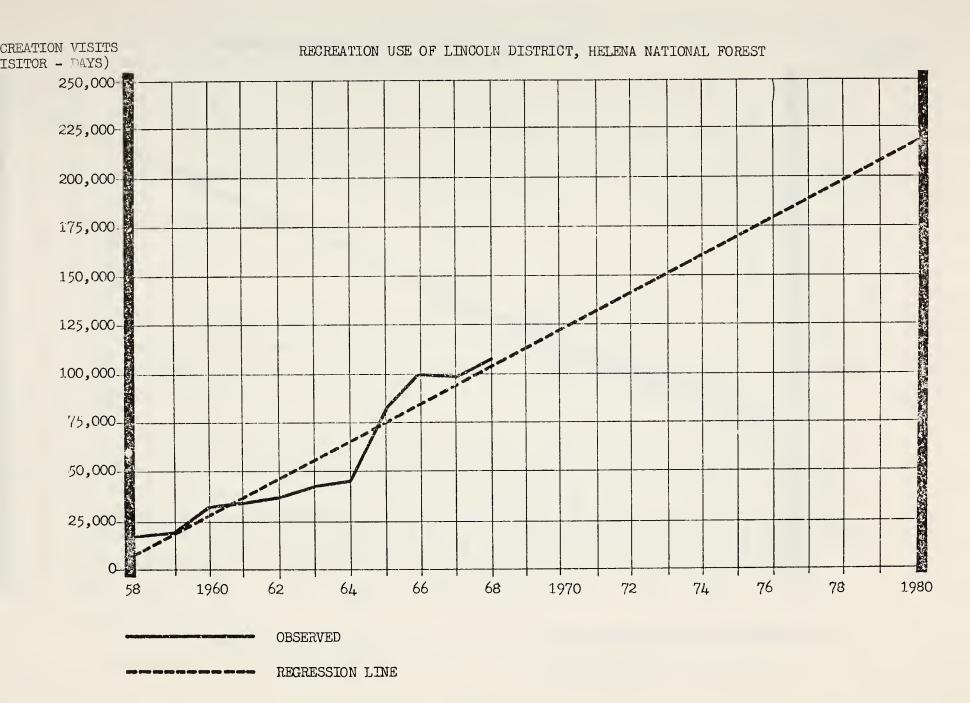
With the projected increase in tourism (increasing traffic flow and recreation use), there should be a corresponding growth in Lincoln commercial activity. However, seasonal fluctuations will probably continue to dominate local economic patterns, unless some presently unforseen development occurs.

In summary, a steady growth in tourism is predicted, particularly in recreational use of the forests. The limited agricultural production in the area will probably not change significantly. If the wood products industry continues to decline, increased seasonality of employment, continued economic instability, and a smaller permanent population can be expected. As the economic base contracts, the number of local services is likely to diminish, assuming the Anaconda mining operation does not materialize in the near future. Aside from short-term or unpredictable boosts from extractive (mining) industries, Lincoln's greatest economic promise appears to be in the area of

²¹Linear regression using 1958-68 statistics from the U. S. Forest Service, Lincoln, Montana, and the Montana State Highway Commission.







recreation and tourism. Given a greater supply of local services, Lincoln has potential as a residence for retired persons as well.

The economic future of Lincoln will probably be most enhanced if the area can establish itself as a year-round recreation center. Despite generally cold and harsh winters, Lincoln could develop a public image favorable to the recreation and tourism industries. Careful planning, cooperation from the entire community, and expert outside assistance would quite likely increase the probability of successful development of these industries.

Institutional Facilities

Governmental Facilities. Lincoln residents have hotly debated the need for community incorporation and establishment of an official local governmental unit. The incorporation issue must be settled by local residents who, in their considered judgment, finally determine present and projected community needs. The Lincoln Planning Group does not wish to officially recommend or discourage incorporation; however, if the community should decide to incorporate, local citizens must have an awareness of the required governmental facilities. In anticipation of this eventuality, the following recommendations are offered.

Stage I - 500 Persons 22

Assuming a community population of 500 persons, minimum city government personnel should include: a part-time mayor and two aldermen serving voluntarily, a part-time (salaried) city clerk, and an attorney on a yearly retainer fee. In addition there may be a city-county planning board which would assist the mayor and aldermen in matters of zoning and land-use planning.

²² Basic information for Stage I was gathered primarily by the Incorporation Communities of the Lincoln Community Charrette.

Police service would be provided by the Lewis and Clark County Sheriff's Department. The Fire Department would continue on a voluntary basis. The only physical facility needed at this stage would be one or two rented offices.

Stage II - 2,750 Population²³

The governmental personnel required by a community of 2,750 should include: a part-time paid mayor, three aldermen, a full time (salaried) city clerk, part-time (paid) secretary, and an accountant and attorney on a yearly retainer fee. A planning board and possibly other citizen boards would be needed as the demands of the community grow.

A community Police Department would be needed, with a minimum staff of a chief, two officers and an office worker. Other officers could be hired as needed. The Fire Department could continue on a volunteer basis. A maintenance and park department would be needed, having one foreman, three laborers, and one mechanic-laborer. Initially the foreman, mechanic-laborer, and one laborer could be hired, and the remaining laborers added as needed.

Needed physical facilities would include: two offices for the administrative functions, a jail with three cells (one for women and two for men) plus a tank, a police chief's office with storage facilities for records, and a maintenance shop (could also be used by the fire department). Additional office space could be rented when needed. As Lincoln reaches a population of 2,750, some provision must be made for obtaining maintenance equipment such as: a road grader, dump truck, loader-backhoe, an additional pick-up, and a sewer rig.

²³ Based on "A City Government Complex for Miles City, Montana," School of Architecture, Montana State University, Masters Thesis by Deane Leidholt.

The facilities constructed during Stage II should be adequate for a community population of 2,750 to 4,500. If the population continues to increase and stabilize, the community may want to provide more facilities. Alternatives might include a meeting and court room, an additional office, storage space, or garages for the municipal equipment.

Medical Facilities. Lincoln is presently served by one physician. There is an expressed need for a local clinic with medical and dental services as well as some basic x-ray and lab facilities. The possibility of a hospital should be considered if the Anaconda operation materializes (assuming a minimum population of 2,750). Determination of what these facilities should be and how the hospital should be staffed is a complicated procedure. A community group should be formed and legally incorporated. As such they can apply for federal funds to finance a professional study of the problem, resulting in objective recommendations for community action.

Religious and Social Facilities. As Lincoln grows, the community will probably want to establish church facilities to supplement the two presently in use. Community decision will determine the religious affiliation most suited to citizens' wishes; this report will be concerned only in pointing out areas deemed most desirable for such facilities.

Lincoln will require a public library in order to properly serve the needs of the community. This may or may not be combined with other needed or existing facilities. A structure of 1,500 square feet would probably be satisfactory, as long as the community population does not exceed approximately 4,500 people. Assuming public meeting areas will be available in the new City Hall and the school facilities, no further increase in social facilities is anticipated.

²⁴Harlowtown (population 1,734) and Big Timber, Montana (1,660 population), presently support hospital facilities.

Recreational Facilities. Provision of adequate recreation facilities for the Lincoln community assumes consideration of two distinct requirements: (1) to provide adequate playgrounds, play fields, parks, and indoor facilities to meet the needs of local residents, (2) to encourage more visitors to the Lincoln area, thereby increasing commercial activity within the community.

Present community recreation facilities include Hooper State Park, the Lions Club Park with its covered skating rink (under construction), and the community hall which is used as a library, gymnasium and meeting place. The playground facilities of the school are available during non instructional hours, although they do not adequately meet community needs; there are no areas maintained as playing fields for softball and other team sports.

In addition to school site improvements, playgrounds for young children should be provided and should be easily accessible to anticipated areas of population concentration. Places where older children can sit and talk or just enjoy the surroundings, and centers for young and old to read, dance, play games, or bowl will be in greater demand. Eventually Lincoln may want, and be able to finance, a community swimming pool.

Facilities for visitors can add to or detract from the community, depending on how they are developed and advertised. The present seasonality of tourism and commercial activity could be partially off-set by a ski area development in the Copper Creek area. However, the success of such a development may depend on improved transportation facilities between Lincoln and other communities in Montana and the Northwest.

²⁵See Appendix for proposed ski development plan.

Educational Facilities. The present Lincoln elementary school is located in a wood frame building having seven classrooms, seven full-time teachers (including the principal), and a total enrollment of 147 students in grades 1-8. The building, situated on a two acre tract of land, was constructed in two stages, one of which was finished only a few years ago. The school is presently filled to capacity. Since construction the foundation under the new portion of the building has settled, causing cracks in the walls and roof. The school grounds are not adequately developed, having only rudimentary playground equipment, a small gravel surfaced parking area, and little landscaping. Many residents seem to feel that, rather than attempt to improve this facility, they should wait until the community is ready to build a new school, and put their resources into it.

Of the fifty-six high school students living in Lincoln during the 1969-70 school year, forty-two went daily by bus to Augusta (58 miles distant), and fourteen attended schools in Seeley Lake, Augusta, or Helena. The total annual cost of bussing or boarding these students was calculated at \$17,428. The long and potentially dangerous bus trip, separation from their families (for those who board), and the impossibility of participating in extracurricular activities, are social costs to the students and their families as well.

Twenty-five percent of the total Lincoln population attends primary and secondary school either in Lincoln or nearby towns. In addition, 35% of the total community population is 21 years of age or younger. Lincoln's school problem is typical of the problems facing many rural communities: How can a small, relatively isolated community, with limited financial resources, provide modern educational services? In a study of American high schools, one authority observes that high schools of less than 100 students per class cannot provide quality education. This

²⁶ See The American High School Today by James B. Conant.

TABLE VIII²⁷
SCHOOL CENSUS AND POPULATION PROJECTIONS, ACM IMPACT INCLUDED

Years	1969	1975	1980	1980 (low dev.)	1980 (high dev.)
0 5	62	75	87	256	438
0 - 5 6 - 13	121	132	152	428	690
14 - 18	74	76	84	246	424
19 - 21	8	9	10	30	48
Total	265	292	333	960	1,600
Grades					
1 - 6	112	110	118	352	580
7 - 8	35	35	39	114	190
9 - 12	_56	<u>65</u>	74	221	<u>372</u>
Total	203	210	231	687	1,142
Total Population	758	840	923	2,748	4,573

authority offers no suggestions for remote communities such as Lincoln.

According to these projections, Lincoln will not attain sufficient school enrollment, as judged by Dr. Conant, until 1985. However, discontent with the existing arrangement may influence Lincoln residents to begin high school services long before 1985. Unfortunately, the Lincoln

 $^{^{27}}$ The projections are a direct linear relation to the overall population projections presented earlier.

Educational Charrette did not address itself to the general issue of providing broad educational services to rural areas; there is an obvious need for detailed study of this problem.

Housing

There are a total of 256 dwelling units in the Lincoln townsite, and an additional 28 dwelling units in the outlying areas ($\frac{1}{4}$ mile North, South and East and $1\frac{1}{2}$ miles West). Of those in the townsite, 169 (66%) are permanent homes, 46 (18%) are summer homes, and 41 (16%) are mobile homes. Typically inexpensive construction of summer homes which often are later converted to permanent status, contributes to a relatively high percentage of inadequate housing.

There are about 550 acres in the proposed Lincoln Townsite, or approximately 0.5 dwelling units per acre; individual subdivisions average about 0.8 dwelling units per acre. Approximately 250 vacant acres in the townsite could be developed for housing. It would be possible to construct an additional 500 dwelling units within the proposed boundaries of the incorporated Lincoln Townsite. However, taking into consideration anticipated expansion of the commercial district, and existing multiple land ownership patterns, the community might more realistically plan for construction of an additional 350 to 400 dwelling units.

There are 483 permanent residents living within the boundaries of the present Lincoln Townsite (about .88 persons per acre). In trying to establish a reasonable target density for the community, other cities in Montana were investigated; densities range from 2.3 persons per acre in Belgrade (population of 1,057), to 12.3 persons per acre in Deer Lodge (population of 4,681). Population density did not seem to have any particular relation to town size. If the existing aesthetic qualities are to continue and individual water and sewer systems persist, the overall density of Lincoln should probably not exceed five persons per acre, or between 1 and 1.5 dwelling units per acre. This relatively low density would contribute to preservation of many of the natural environmental features now evident in the community, although it would also result in increased service, maintenance and utility costs.

elements of the plan



Chapter IV

ELEMENTS OF THE PLAN

General Assumptions 28

In establishing goals for planning, the following assumptions have been made: (1) the valley plan should be capable of meeting the needs of approximately 4,500 people by 1980; (2) it is generally desirable to encourage more intensive recreational uses of the area; (3) the Anaconda Company will be mining in the Heddleston District; (4) employment in local wood products industries will continue to decline; and (5) the age composition of the resident population will more closely resemble national population statistics as the community grows and more jobs are available for young people.

The scenic and wilderness qualities of the Valley should be preserved and enhanced. The advent of the Anaconda Company does not mean that other resources of the Valley can be ignored. Perhaps the greatest resource of the Lincoln area, and one that may provide the most stable long-term economic base, is the scenic and wilderness character. With expert planning, the recreation industry could provide employment for many residents at least ten months of the year, and possibly longer.

Although the scenic and wilderness qualities are valued highly by a majority of the present population, the Lincoln area, with its sizeable quantity of public land, is not the exclusive domain of any special interest or local group. As tourism increases, preservation of the land for use by the general public must be planned for as well. It is evident that Lincoln residents do not have access to services and incomes typically found in more populated areas; preferably a more stable economic climate will be established as Lincoln, and similar communities, learn to profitably utilize their natural environmental resources.

For purposes of this study, the Lincoln Blackfoot Valley is defined as the area from the Continental Divide to the Powell County line of the Blackfoot River watershed.

Objective I

The suggested plan must meet the needs of the present and anticipated population of Lincoln. The kinds of planning needed will vary for different population levels. The laissez-faire approach, although adequate for Lincoln in years past, will not be satisfactory as the population increases.

Generally speaking, the major goal is to suggest a plan that will contribute to the greatest long term benefits for the majority of the community. More specifically, the plan should offer an objective means to develop the community facilities for a projected potential population of 4,573 by 1980.

In meeting the needs of Lincoln residents, the plan must provide for housing of various kinds, especially mobile homes. As a convenience factor, it is also desirable to plan for concentrations of population near the most highly used services. The services provided should be good enough to encourage population stability. To meet anticipated needs, Lincoln must have good schools, water and sewer systems, streets and parks. Fire protection and a good police department will be necessary, as well as adequate medical facilities.

Objective II

The suggested plan must provide for preservation and development of scenic qualities, outlooks, and scenic points; those places normally accessible to the general public, and from which there are especially scenic views, should be preserved and in some cases improved or developed for human use. Some scenic points, such as the Flesher Pass Outlook, would be particularly amenable to construction of small rustic information signs directing the viewer to mountain peaks and points of historic or scenic interest; refuse containers should be provided at all scenic viewpoints.

Some important scenic points include Rogers Pass and nearby historic Cold Point, the Flat Marshes along Highway 200, the Upper Blackfoot east of the Flesher Pass Road, the open areas along Highway 200 between Hardscrabble Creek and Lander's Fork, the Gravel Pit along Highway 200 looking north toward Stonewall Mountain, the open areas west of Lincoln, the entrance to the Canyon west of Lincoln, and the Canyon itself to the Powell County line.

Points that are less frequented, but of considerable scenic value, include Lewis and Clark Pass, Alice Creek, the Upper portion of Copper Creek, the Blackfoot River, the Stemple Pass Road as it enters the Valley, and the Old Lincoln Townsite and cemetery; the latter offer potential as historic sites of considerable tourist interest if restored properly.

These scenic points should be protected from developments that would detract from their scenic uses. Billboards, gas stations, drive-in theaters, storage tanks, refuse dumps, and gravel pits should be excluded from these areas. In addition, any construction that would obstruct scenic views, should not be allowed.

All the major circulation routes are scenic with the exception of those few places where man has destroyed the natural beauty. Therefore, it would be desirable to classify the following as scenic corridors: Highway 200 from the Continental Divide to the Powell County line, Flesher Pass Road from the Divide to Highway 200, and Stemple Pass Road (Poorman Creek Road) from the Divide to Highway 200. Landowners should be encouraged to restrict development near the highway; this implies that construction of signs and traveler's facilities would be approved by some impartial agency such as a City-County Planning Board.

Objective III

The suggested plan should provide for maintenance and enhancement of the present wilderness character of the area. In addition to scenic amenities, the wilderness character of the Lincoln

area offers potential as a thriving recreation development. Good fishing and hunting are especially important to the recreation industry. In order to retain and, in some cases, improve these resources, the ecology of the area must be allowed to perpetuate itself without significant disruptive human influence. Although there is no way to eliminate the impact of a major mine and the presence of an additional 3,800 people in the valley, potentially adverse consequences of these developments can be controlled and minimized.

An important consideration is the protection of land, water, and air from pollution. Future developments must be located in areas least susceptible to contamination; construction must be designed to remove, as nearly as possible, the causes and sources of pollution. To meet these objectives, it is desirable for the community to build an effective sewage treatment facility that can serve most of the population. The community should also investigate the need for more strict air and water pollution control.

The development of the present town site should be directed and controlled so as to preserve the beautiful stands of Ponderosa Pine in the area and protect the critical locations along rivers, creeks, swamps, and aquifer recharge areas. The Social Values Inventories (presented earlier in this report) can be of continuing assistance in determining which areas should be developed or preserved. Winter game ranges and elk calving grounds should not be destroyed; priorities should be directed toward developing land of lower social value for urban or industrial uses. Areas of high recreation potential should be developed as campsites and picnic grounds rather than utilized as sites for dumps, industries and commercial facilities.

High priority should be placed on protecting forest areas, especially those areas seen by many people or those having important ecological relationships to all species, including man. It is also important to protect forest areas where their destruction could cause flood and erosion danger.

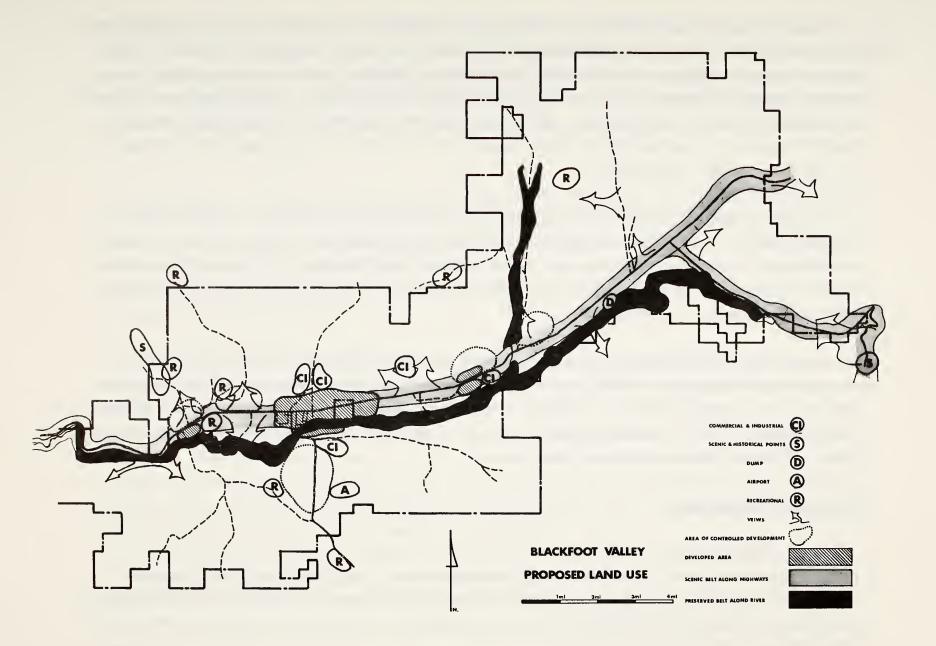
Sixty percent of air pollution is caused by the automobile; in town, cars give off much more pollution (due to slow driving, starting, and stopping) than on the open road. Obviously a reduction in local automobile traffic could alleviate the pollution problem significantly. The townsite should be planned so that residents find it easy and pleasant to walk from home to school or commercial areas. Similarly, good traffic flow is far less inducive of pollution than poor traffic flow; good planning will eliminate construction of awkward street layouts or too many intersections on main thoroughfares.

Proper handling of sewage and other potential ground water pollutants is a physical and economic benefit to everyone; good planning will help reduce hazards to health as well as allow construction of a simple and inexpensive water system of shallow wells. If deep wells or a protected watershed with a reservoir and long pipe system become necessary, this will add a large additional expense to the community.

Commercial developments, such as gas stations, motels, restaurants, bars, sporting goods stores, and movie theaters, usually must be easily accessible from the highway. Many commercial operators would greatly profit by locating in a pleasant pedestrian core with convenient parking and proximity to other commercial activity. Other developments such as residential areas, car lots, and dumps, should be shielded from view.

The General Valley Plan

The proposed General Valley Plan will determine the character of the Lincoln townsite, as well as the entire Blackfoot Valley. Land located near, and seen from, the highway should be designated a "scenic corridor". On the attached map, arrows designate scenic view points which are recommended as traveler pulloff areas. Areas that might be developed as historic or other scenic sites are indicated as well.



Much of the valley area is controlled by the Forest Service. Present Forest Service policy of management for sustained yield, if implemented, should protect the ecological balance as well as allow recreational development for human use. Private landowners will hopefully adopt these goals as well. Enforced controls should be established to protect the ecosystem if private owners fail to adopt protective standards. These suggestions for preservation of public forest areas are primarily based on multiple use considerations that are compatible with present Forest Service policy. For private land policy, it might be advisable to offer incentives for environmental protection (such as scenic easements).

The major use of agricultural land in Lincoln is for grazing, with some hay and a little grain production; agriculturally-classed land is used for scenic as well as economic purposes. Controls and incentives should be instituted to protect this land; areas west of Lincoln will be under pressure for development as commercial and residential sites, and are especially in need of classification and protection.

The proposed recreational areas could be used for many different purposes, ranging from community parks to campgrounds and ski areas. Campgrounds and picnic sites should be constructed in areas of relatively flat land with tree cover and perferably near an adjacent body of water. A ski area is proposed for the north slope of Stonewall Mountain. 29

The flood plain should be carefully protected against further residential encroachment. Increased public ownership of land adjacent to the river should be seriously considered. Land of 25% slope or more and having a high water table, is not recommended for residential use. In general, housing development should be clustered on fairly dry land rather than located along waterways, thus eliminating potential pollution and flooding problems.

²⁹See Appendix for detailed description of plan.

Location of heavy industry should be influenced by the prevailing westerly wind. For example, the post yard directly east of the airport, should be relocated before substantial residential development is contemplated for that area. If adhered to, present pollution laws should prohibit concentrated air pollution caused by atmospheric inversion layers. Non-polluting industries can be satisfactorily located in the open areas south of the Lincoln townsite.

The area north of the Lincoln townsite would be a suitable location for construction companies, builders' supplies, used car lots, outdoor theaters, power sub-stations, gravel storage piles, and maintenance yards. Although the soil condition of the land to the south is better for building, it is highly exposed from the Stemple Pass Road. Development in this area would also have to be screened, while the area to the north is already removed from public view for the most part. However, care must be taken so these developments do not encroach too closely on the adjoining residential areas. (Note the "green belts" separating them - see map on p. 78)

Although the present airport location may be retained, relocation further from the center of town would be preferable; we have indicated one possible relocation site south of the townsite, although the location requires serious study by qualified engineers. Other areas could also be considered as potential airport sites, if suggested development plans provide protection for present environmental and scenic qualities.

The proposed dump location has been studied by the Forest Service; although close to the present dump, it detracts less from the natural environment because it is no longer observable from the highway. However, the people of the valley should investigate a more permanent refuse disposal site with considerably greater capacity to meet increasing needs in the years ahead.

Two areas outside of the present Lincoln townsite are of particular concern: (1) The area of the 7-Up Ranch (section 14) and surrounding properties, and (2) the area along the highway west of town to the Powell County line. The former is the only major piece of land along Highway

200 (east of the proposed development area) not presently controlled by some governmental agency, the Anaconda Company, or the Sieben Ranch Company. A blighted strip consisting of a deserted saw-mill, junk cars, and gravel piles, presently exists on the north side of Highway 200. In addition, much of the land is in private ownership which complicates implementation of informal planning control agreements. Scenic easements, zoning regulations and incentives will be necessary to insure protection of this area from further environmental degradation. The second area is also characterized by multiple private ownership; in addition, there are already several commercial enterprises and many small platted subdivisions in this area. The terrain, because it is open and unforested, is particularly subject to environmental blight. For example, the Montana Power transmission lines cut up the hill at the west end of the valley $\frac{1}{2}$ miles from Lincoln; their scar is in view as far as the canyon entrance west of Lincoln.

Residential, commercial and recreational uses of these two areas are not necessarily incompatible if developments are planned so as to minimize unsightly imposition on the highways and adjoining properties. The following practices are recommended: (1) Allow development of these areas only in a controlled or planned manner. (2) All developments should be screened from the road. (3) Open areas with north-facing views (particularly in section 23) should be protected by scenic easements. (4) A rigid sign and billboard policy should be established and enforced. (5) All structures should be set back at least 100 feet from the right-of-way.

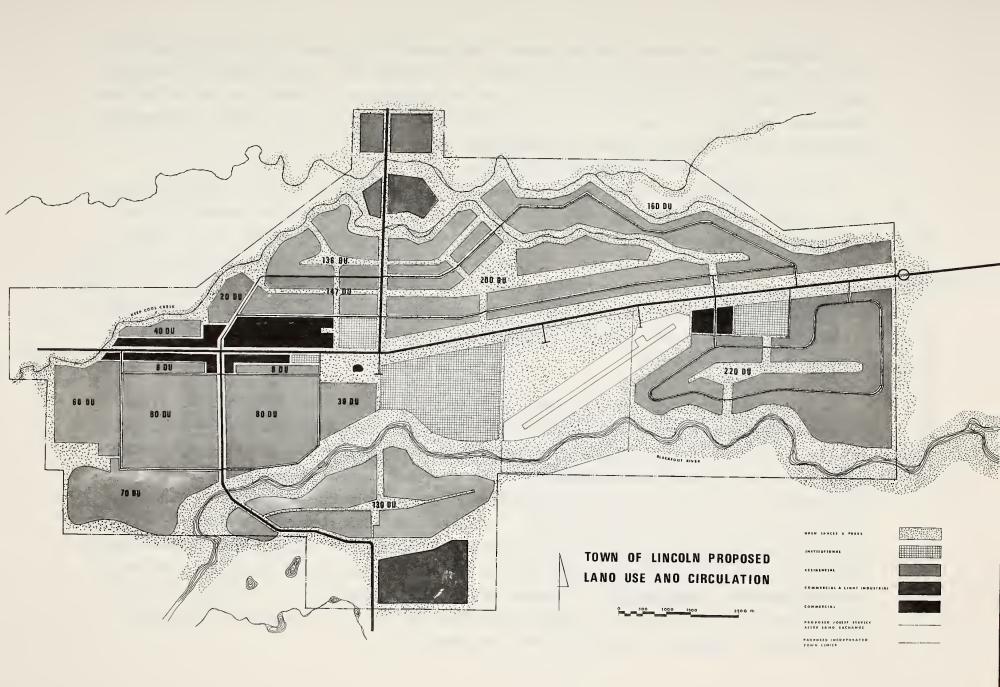
The Townsite Plan

Several different designs were considered, but two possibilities were selected as the most appropriate physical plans for the townsite. One possibility is to retain the existing townsite and developed area, but to locate subsequent developments in a dryer and more protected area. Under this plan the existing townsite would serve as the commercial core, and a residential (satellite) community with neighborhood shopping and educational facilities would be developed. However, this approach presents several difficulties: (1) There are no good development sites near Highway

200; the possible sites north, south, and west of town are unprotected by trees, and therefore, highly exposed to winter storms; needed windbreaks would delay site developments as well as increase development costs. (2) The best sites, such as the Lincoln Gulch area, are over a mile from Highway 200 and three miles from the existing townsite; inconvenience in reaching the commercial core and increased automobile traffic, resulting in greater air pollution, are obvious disadvantages. (3) This plan assumes a need for two elementary schools, two water systems, and two sewer systems which would probably be prohibitively expensive.

A centralized townsite plan would probably be more practical and economical: (1) The land east of town is obviously better suited to development than the wet areas to the north and west. (2) The holdings of the Anaconda Company provide excellent locations for large residential developments, as well as ideal school sites. (3) Potentially good water and sewer service would be available to all residents. (4) Most residences could be located in protected areas surrounded by trees. (5) Unattractive commercial and industrial developments would be removed from exposed areas, and commercial and institutional facilities would be centralized. (6) A system of pedestrian green strips would encourage more people to walk to and from the commercial areas and schools. The pedestrian system would also allow snowmobile traffic in winter months, alleviate potential accident hazards between cars and snow vehicles, and enhance the community park system by preserving large groves of ponderosa pine.

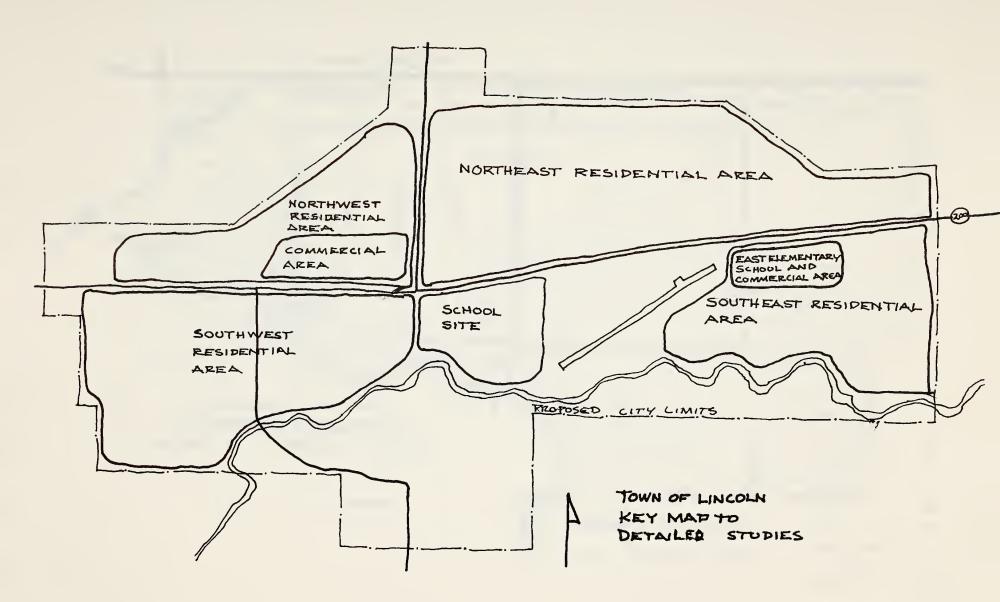
Residential construction should be limited in potentially wet areas, and sites along the creeks should be preserved for recreational uses; these recommendations apply particularly to the area along Keep Cool Creek. The area along the Blackfoot River should be similarly protected and preserved. A 600 foot wide buffer strip should be established as a first step in providing long term flood control and ecological protection.

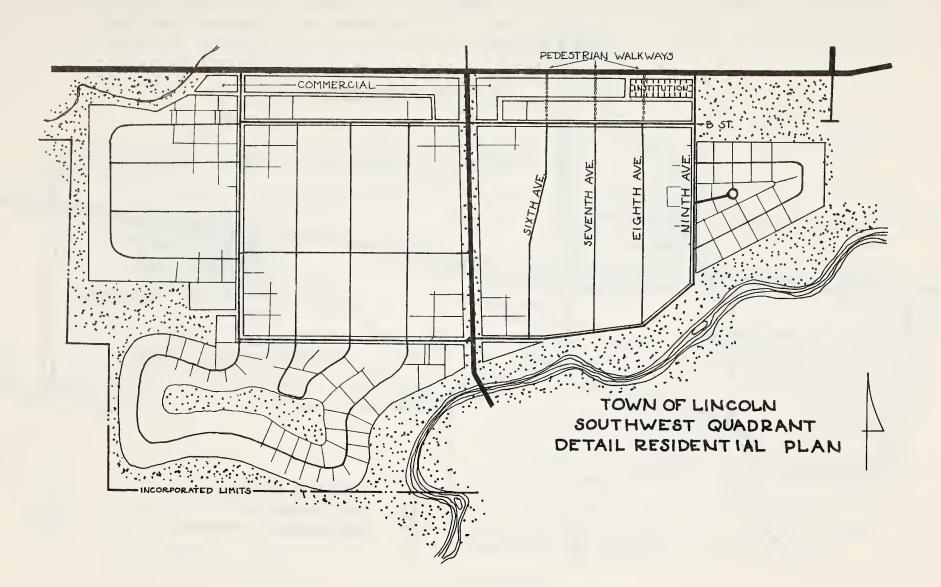


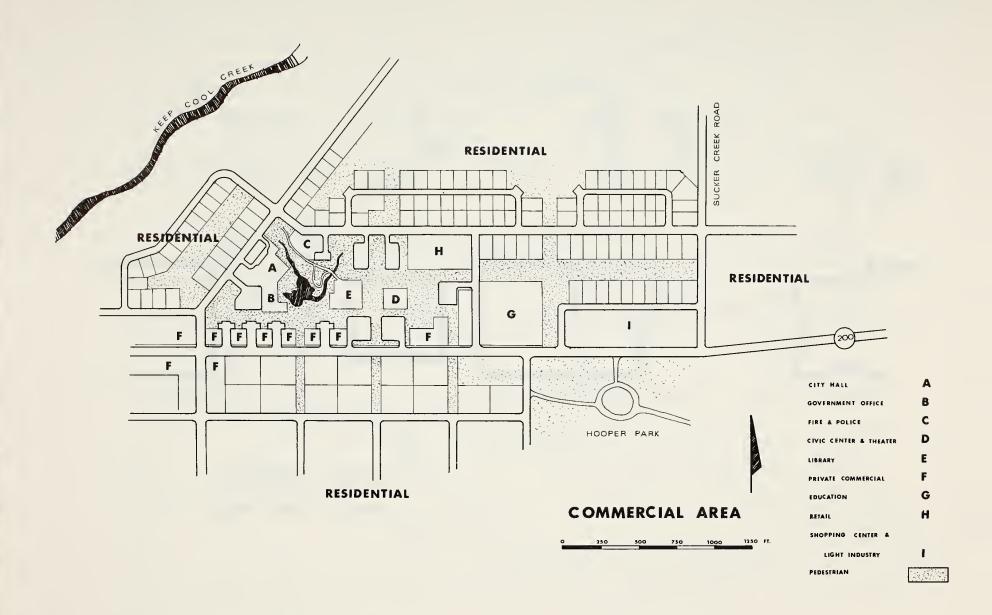
<u>Circulation</u>. An inherent problem exists if the community continues to grow along Highway 200, since the highway will invariably become a barrier dividing the town. Many commercial establishments are dependent on the highway and will become increasingly so as recreational use of the area increases. Projected average traffic on Highway 200 is 2,400 cars per day by 1980; this does not include the impact of the potential Anaconda Mining Development.

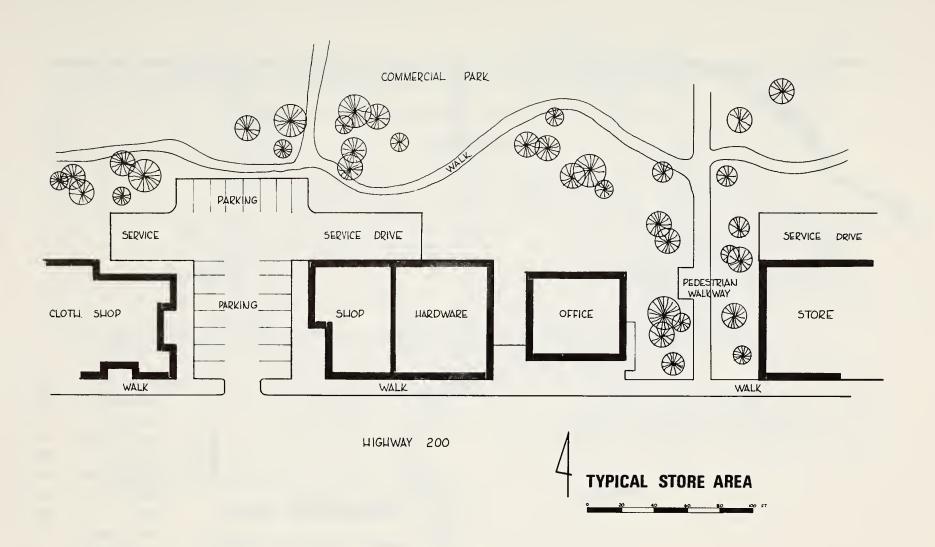
Within the community boundaries, it appears that the best plan for traffic control on Highway 200 is to provide alternate residential routes (by means of a collector road system) and limit the number of access roads. Strict regulations should be established to control access traffic, especially to and from subdivisions. A 250 foot buffer strip should be established along the highway and developments here should cover no more than 10% of the area; likewise, tree cutting in this area should be allowed only for reasons of safety. To emphasize its critical position in preserving the wilderness character of the community, this strip is indicated as "park" on the Land Use and Circulation Plan. (See p. 83)

A system of collector streets is shown in the proposed Land Use and Circulation Plan (note the lines running through the residential areas). Unlike the highway, residential construction on lots fronting these streets could be allowed. However, their main purpose is to collect traffic from the residential loops and cul-de-sacs, and to allow free movement to and from core areas of the community and residential areas. To reduce traffic hazards on Highway 200, a few changes in the existing street system are recommended; it is particularly important to close off the following streets which enter from the Lincoln Villa Estates onto Highway 200: Sixth Avenue, Seventh Avenue, and Eighth Avenue, and to extend B Street through to Ninth Avenue (see Southwest Quadrant Detail Residential Plan). A portion of the rights-of-way of these avenues should be preserved as pedestrian walkways. (See the proposed Commercial Area Plan showing how these pedestrian walkways service the new commercial and institutional development)





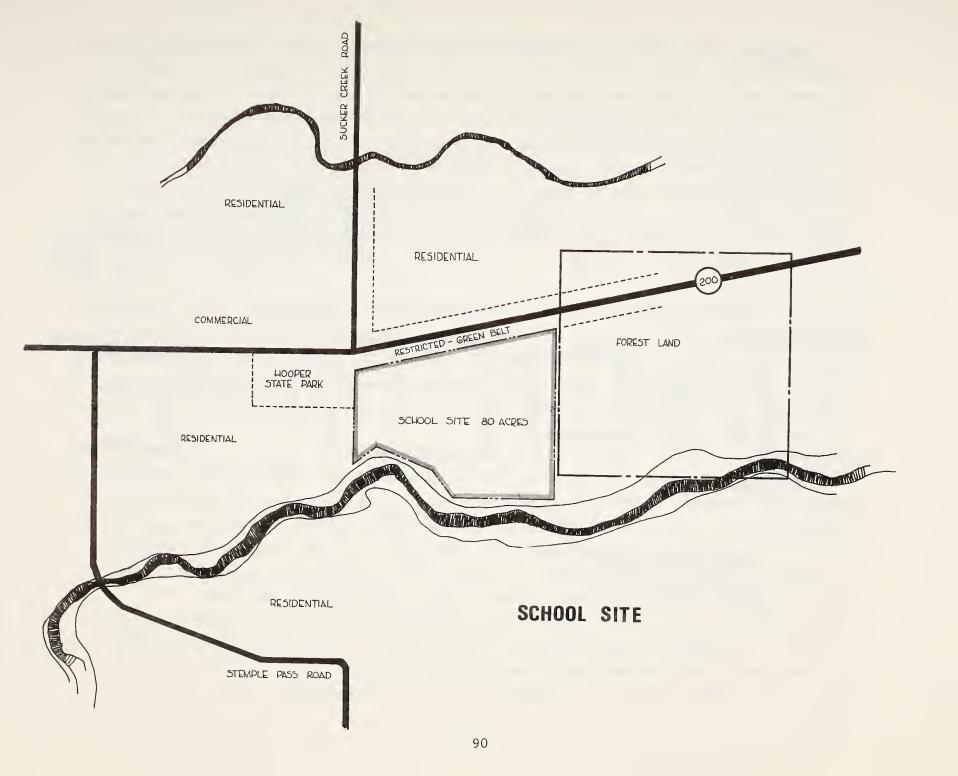


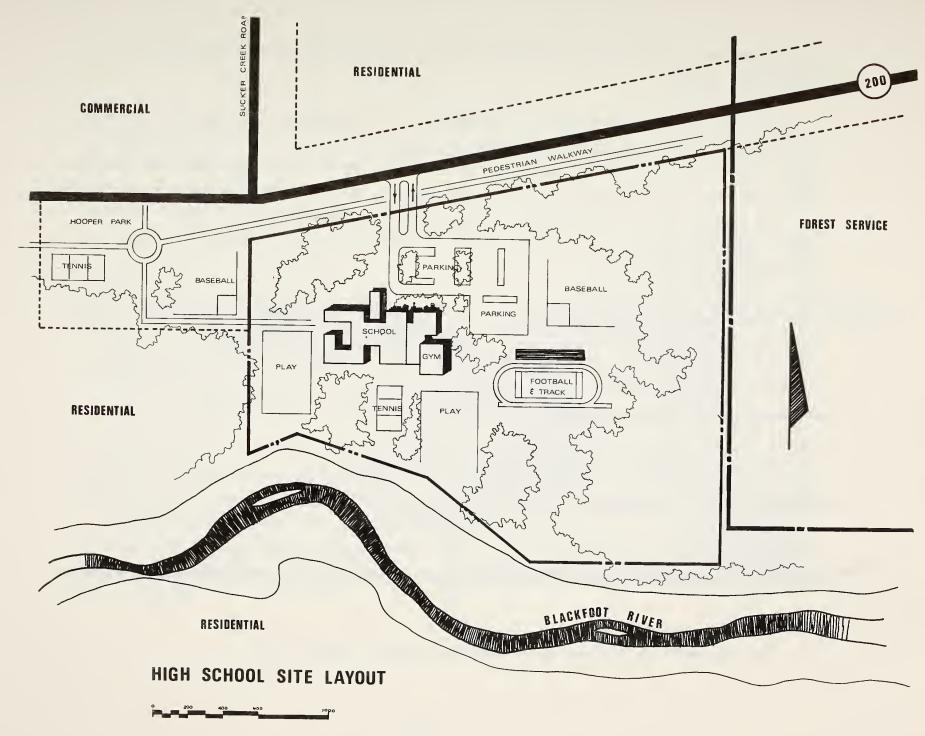


Commercial. The proposed core commercial and institutional area (see attached plan) will concentrate commercial activities in one area, and provide ease of traffic flow from the highway. The present bank is the only existing facility not accommodated by this plan. If the bank facility eventually expands to meet growing population needs, the board of directors may choose to relocate in the proposed commercial area rather than build an addition to the present structure. Existing and new businesses that depend in large part on highway customers should be allowed to operate in proximity to the highway. Possible locations for these businesses might include the commercial core along the highway, south of the highway west of Hooper State Park, west of the proposed commercial core, in the commercial areas east of the airport, or in the area west of town where some commercial facilities already exist.

The city offices and meeting areas, police department, fire department, library, and medical facilities should all be located in the commercial core. Preferably school facilities should be located on the parcel of land between Hooper State Park and the Forest Service (see attached School Site Plan). The parcel of land directly south of Hooper State Park might serve as an alternate school site. This location is less desirable however, since there is not enough land for both elementary and high school facilities.

Residential. In order to allow flexibility of development the total capacity of all residential blocks proposed (see Town Land Use Plan on p. 83) is greater than the projected community population of 1980. The 1,585 dwelling units shown should allow growth for well over 5,000 persons. Due to varying interests and capabilities of affected landowners however, some of these areas may not be developed. For example, a maximum of 160 dwelling units is proposed for the extreme northeast corner of the townsite; this land is owned by the Anaconda Company, the Grosfield family, and the Lincoln Heights tracts. However, the owners may not choose to develop this land. To accommodate such variations in future land use, several development alternatives have been shown in the detailed plans of the residential areas. Similarly, the 70 dwelling unit block in the southwest quadrant of the townsite and the 130 dwelling unit south of the river,





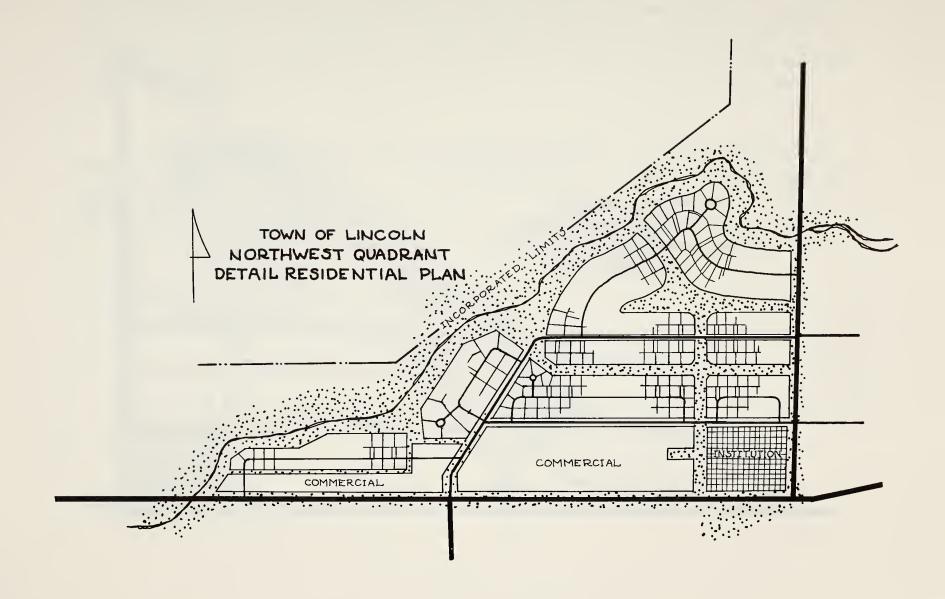
are optional areas that could be developed instead of the 220 dwelling unit area east of the airport (see p. 83).

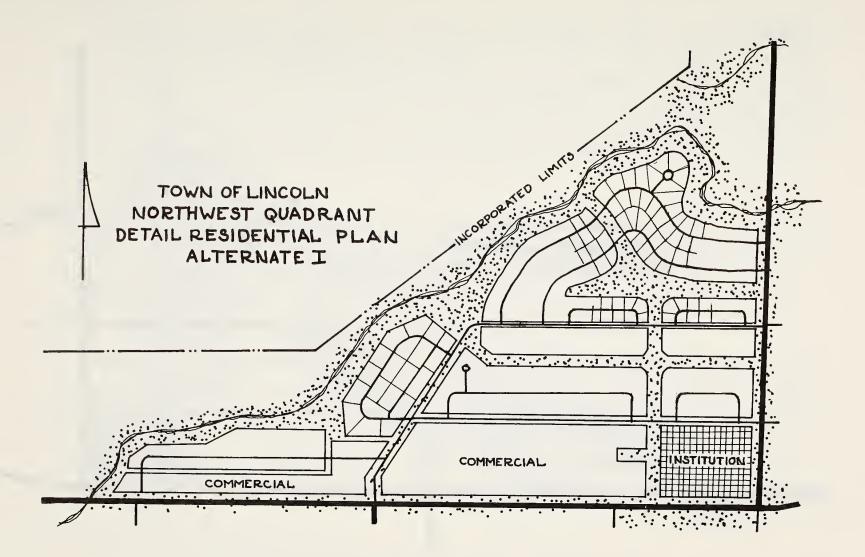
Either of two alternative plans are recommended for development of the northwest quadrant of the townsite. The first proposal is based on a "double lot" system of development in which one row of lots is located along the street, and a second is located behind the first with driveways reaching through the first line of lots. In all cases, a lot has either immediate street frontage or direct access to park areas adjacent to the residential lots (see attached plan). The residential sites can be laid out as mobile home lots (minimum 6,000 square feet), or as lots for conventional homes.

The alternate northwest quadrant plan is a more conventionally planned development in which all lots have street frontage. Shorter residential driveways are a positive feature, although this plan necessitates installation of additional streets, sewer lines, and other utilities, resulting in increased construction costs. On the other hand, the double lot plan (described above) has the advantage of greater flexibility in development for mobile homes.

Most of the proposed residential areas have been planned as mobile home sites as these will probably represent the vast majority of housing for the rapidly increasing population. Permanently established residents will probably want more than a minimum lot, however. Preferably lots should be larger than the legal minimum, particularly on land with existing tree cover. Dwellings fronting collector streets should be set back 60 feet in order to protect residents from noise and headlight glare; setbacks could also preserve the tree cover along these streets.

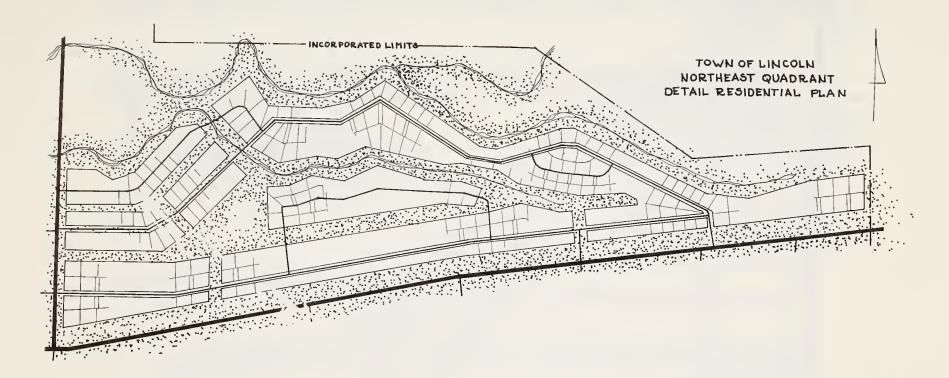
³⁰ See Appendix for proposed development regulations for mobile homes.

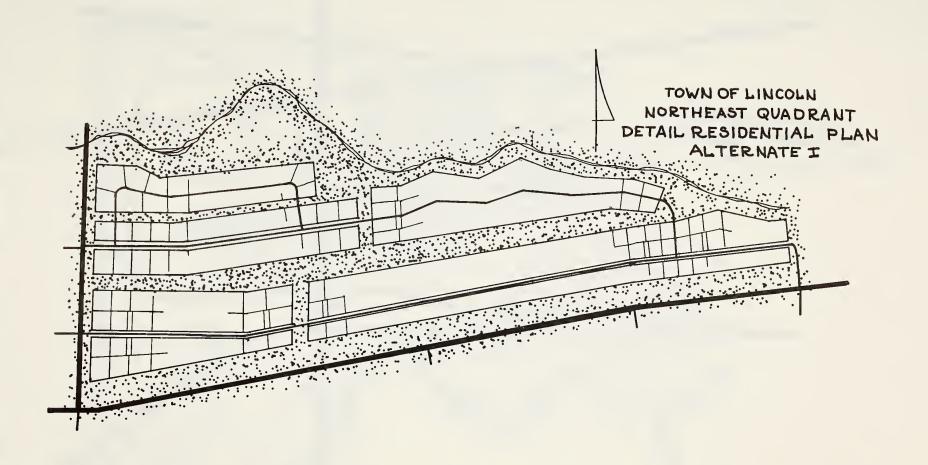


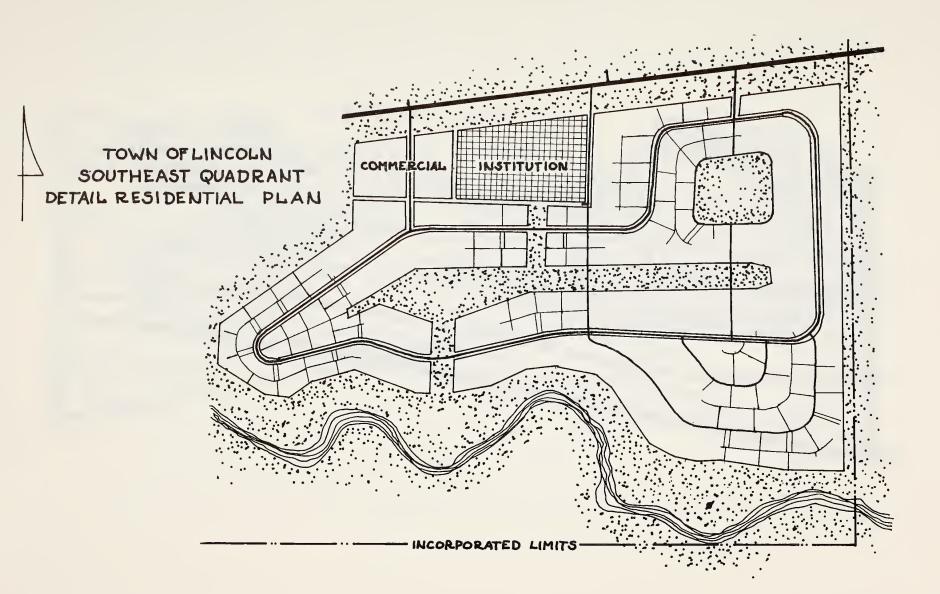


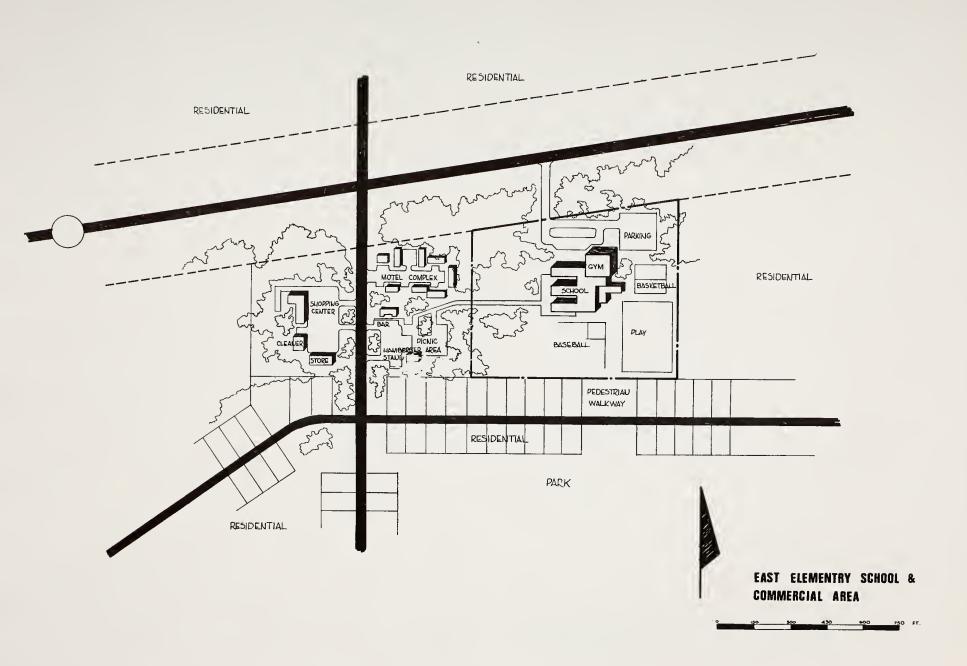
Although, the proposed northeast quadrant plan is designed as a unified development, successful implementation would require considerable cooperation among the various landowners; the alternate plan for this area would utilize only Anaconda Company owned land. Either plan however, is designed to accommodate a unified system of parks, pedestrian walkways, and protected stream beds; any pattern of development chosen for this area should take into account this system of public spaces.

The proposed southeast quadrant plan allows additional commercial and institutional development. The attached detailed drawing of the "East Elementary School and Commercial Area" suggests a developmental plan for this area.









implementation



CHAPTER V

IMPLEMENTATION

Valley Plan

Although the need for planning and implementation of planning in the Blackfoot Valley seems clearly established, the available tools are weak and difficult to put into effect. Defeat of proposed incorporation of the Lincoln Townsite in June, 1970, temporarily eliminated several of the possible implementation measures available to the town and valley. This section presents and discusses the means of implementation available immediately, as well as methods that could be established through local action (such as incorporation), and through new state and national legislation.

Zoning. Zoning is a way of controlling land use in a particular area. There are two methods of initiating zoning in Montana. One is through an incorporated town, and the other is through a rural zoning district.

An incorporated town may zone and enforce zoning within its incorporated limits. In addition, a town may zone an area up to $4\frac{1}{2}$ miles from its incorporated limits through a city-county planning board and with the consent of a majority of landowners in that area. Enforcement of zoning however, is dependent on action by the county commissioners.

Montana state law provides for zoning an area of up to 12 miles from the incorporated town limits if the planning board can demonstrate that there are problems of development in the area and citizens agree to zoning. Although the effectiveness of this law is still in question, it is generally acknowledged it will never be a strong planning tool in its present form. In both cases the enforcement of any zoning regulation is entirely dependent on action by the county

commissioners; frequently there is no enforcement at all due to the reluctance of county commissioners to assume zoning responsibility.

It is even more difficult to undertake planning and subsequent zoning programs when dealing with areas outside the established City-County Planning Board's jurisdictional area. As outlined by state law, before a rural planning and zoning district can be formed, sixty percent of the freeholders within the planning and zoning district must petition the elected officials to form such a district. Affected landowners oftentimes cannot agree on the need for establishment of a rural zoning district.

If effective planning is to be implemented, there is need for new legislation to enable zoning of rural areas such as the Blackfoot Valley. The process for implementation of zoning should be simplified, and there should be specific measures providing for the enforcement of these zoning regulations by local officials. Methods should be available allowing concerned citizens to initiate legal action against violators of zoning regulations. The zoning law should provide for a zoning classification that would limit the density of residential development when it is ecologically desirable to do so. Thus, it would be possible to protect flood plains, steep slopes, and other areas where development may create hazards to other landowners.

In zoning for commercial areas along highways, the local zoning board should be able to require adequate setbacks from the highway right-of-way, large separation between access roads, and attractive landscaping in areas visable from the highway. The zoning board should also have the power to control placement, size, and character of signs. Regulations should not be set up with the intention of hindering and prohibiting all general development, but rather to avoid haphazard and unharmonious development with long range detrimental effects to the community.

Scenic Easements. Scenic easements, conservation and agricultural easements, and other contractual agreements between landowners and governmental bodies are designed to control land use.

In each of these agreements the governmental body compensates the landowner for limiting the use of his land so that it conforms to a general plan.

For example, a portion of the actual value of a block of land could be purchased by the government, while allowing the landowner continued use of the land. This measure is an expensive but permanent one, and is desirable in cases where permanent preservation is extremely important and funds are available.

A second compensation measure allows direct lease of land development rights for specified periods of time. Although this method costs less in the beginning, it is also less permanent.

A third means of compensation provides for an agreement to reduce property taxes on a specific piece of land in return for its continued preservation. This measure, along with a more limited measure which would merely freeze the tax rate and assessment of a piece of land, can be very useful in controlling the rate of development in an area. The California Agricultural Land Conservation Act of 1965 is typical of this kind of legislation. The city-county planning board could offer the farm owner a contract which would effectively freeze the tax rate on his property for a period of ten years; the owner could use the land for continued agricultural purposes only. If the farmer decided to develop the land during the contract period, he would have to pay taxes on it as developed land from the time of the beginning of the contract. Although there have been certain problems with this law, especially when it seems to be protecting developers more often than farmers, it is assumed that these loopholes could be eliminated from future legislation. In the state of Montana however, new laws must be passed before these measures can be implemented.

Cooperation with Agencies. In addition to easements on privately held land, there is great need for cooperation between the local planning board and governmental landholding agencies such as the Forest Service. In Lincoln the policies of the Forest Service can dominate the character

of the whole valley. The present Forest Service policies of multiple use and sustained yield allow local Forest Service personnel to work with local planning agencies in a very constructive way. The Forest Service should be able to preserve natural qualities along scenic corridors, around scenic and historic sights and in areas frequently viewed by the general public. This will require the Forest Service to evolve a firm national policy of cooperation with local planning agencies. The Forest Service does not legally have a free hand to take this step with mining development however. As the law is written, mining interests take precedence over all others. This may not be in the best interests of the general public, and possibly should be changed so that no single resource development takes precedence over any other.

Recreational Development. During the course of this study many people have become interested in the possibility of a ski area on the north slope of Stonewall Mountain near the source of Copper Creek. 31 Such a development would create several opportunities for employment, and draw tourist business to Lincoln at a time of year when other economic activity is at a low point. However, this kind of development is not without problems, and a detailed study of the potential effects on the Blackfoot Valley should be made before implementation. The profits to be made in a ski area are typically not in the sale of lift tickets, but rather in the development of housing. If a ski area is established there might be considerable pressure (and speculation) for the development of housing on nearby privately owned land. This should be anticipated, planned for, and controlled.

Several new campsites and picnic areas could be established in the Blackfoot Valley. Some of these sites (see the Blackfoot Valley Proposed Land-Use map) are on National Forest Land, and could be developed by the Forest Service. Other sites, especially along the Blackfoot River, Liverpool and Stonewall Creeks, Smith Lake, and Krohn Lake, will have to be developed by private

³¹A study of this possibility was done as a thesis by Mr. Greg Aldrich, a student in the School of Architecture at Montana State University; a summary is attached in Appendix A.

landowners or obtained for general public use by purchase or trade.

Townsite Plan

Implementation of any proposed townsite plan is highly dependent on the cooperation of the landowners. Planned development can result in a higher return to landowners and developers than an unplanned development pattern which makes no provision for pedestrian traffic, parks, and other amenities. In several cases it would be advantageous to the landowners to band together and develop their properties as a unified block rather than selling off their land bit by bit in separately platted tracts. (See Detailed Residential Plans) There are areas in each section of the town where acceptance of a master plan would benefit landowners considerably through reduced development costs in building roads and laying out utilities. For example, the southeast quadrant of the proposed town plan includes the Grosfield, Hoeffner, Gehring, and Anaconda Company properties. If this area were to be developed as a unit, and in a manner that all landowners would benefit in proportion to the amount of their land in the total development, the areas used as parks, pedestrian traffic lanes, and schools could be planned in relation to the physical characteristics of the land rather than as a percentage of each tract.

Circulation. Regulation of access traffic on Highway 200 is one of the key principles of the suggested plan. It will be necessary to establish regulations, through zoning ordinances, to control access to the highway. The Highway Department would need to cooperate directly with the local planning board.

Further legislation permitting the Highway Department greater control of access roads should be investigated. For example, there is no clear delineation between the highway and the parking areas in front of the commercial establishments in Lincoln. This results in an extremely hazardous situation, especially since there are often many young children walking through this area. It also creates an unpleasant appearance; there is a lack of attractive landscape

features and most of the trees in the area have been removed. The present situation should be corrected, and controls established so that new developments do not follow this pattern.

Capital Improvements. A recent capital improvements estimate for a sewage system for the present townsite and population was \$435,000. The present bonding capacity for a sewer system is about \$38,000. The Federal Department of Housing and Urban Development has a program of grants which could cover as much as 50% of the cost of a sewage system. In many states there are state financed assistance programs designed to supplement federal and local funding. To maintain the present quality of the Blackfoot River, a good sewer system in Lincoln is essential; funding possibilities must be investigated in detail.

There are three ways of establishing sewer systems: A Metropolitan Sanitary System, a Special Improvement District, and a Rural Improvement District. In the Lincoln Educational Facilities book, published earlier this year, there is a detailed description of each of these possibilities.

The establishment of a water system requires essentially the same process; it is suggested that the sewer system take precedence however, since this would allow continued use of individual private water systems through shallow wells.

Streets. Montana state law presently provides no clear guidelines for establishment of subdivision regulations. Clearly a comprehensive subdivision regulation document should be drawn up to provide communities such as Lincoln with the guidelines they need in order to design, evaluate, and carry out good street layouts. In addition, the road access standards established

³² Made by Bob Scruton, Engineers.

by the Montana Highway Commission should be applied rigorously throughout the state so that the situation which exists in Lincoln can gradually be improved. 33

Schools. Should the Anaconda mining operation materialize, the school board will face an especially serious problem in providing adequate school facilities for a rapidly growing school population. Since all mine properties are tax exempt for three years following initiation of construction, the community will have to provide schools for the children of Anaconda employees for over four years before substantial new revenue sources are available. However, federal impact funds may be available to the community, and this possibility should be investigated.

The present tax base is \$902,000. Assuming that the vast majority of people moving into the community will be living in mobile homes, the assessed value of which will not run more than \$2,500 each, the added tax base could reach approximately \$2,500,000. New commercial development may contribute an additional \$500,000 to the tax base, although this is probably a very liberal estimate. In any case, the maximum probable tax base after the Anaconda employees have moved to Lincoln will be approximately \$4,000,000. The bonding capacity is 5% of this figure, or \$200,000. Since the process of designing and building school facilities takes eighteen months to three years, Lincoln will have to find reasonable methods of operating schools using temporary structures such as prefabricated mobile classrooms for the interim period.

Health Facilities. Two basic kinds of organization are most commonly used to establish hospitals in Montana: (1) the Hospital District, and (2) the non-profit corporation. The former operates a school district with tax and bonding power through public elections. The Big Timber Hospital operates under such a system. The non-profit corporation, on the other hand, is composed of interested citizens who are granted the power to raise funds by selling bonds. The Bozeman

^{33&}quot;Approach Standards for Montana Highways", Montana Highway Commission, 1969.

Hospital operates this way. Lincoln would have to form either of these organizations in order to secure planning funds from the federal government. The Lutheran Hospital and Home Association of Fargo, North Dakota, has done studies for hospitals and specializes in running hospitals by contract. They now operate the Livingston, Harlowtown, Sidney, and Deer Lodge Hospitals. Any of these groups can obtain assistance from professional fund raising organizations as well as loans from the federal government at 3% interest. There is also the possibility of Hill-Burton funding (federal). One hospital administrator suggests that the non-profit corporation is easier to run because the public does not have to be "sold" on every step, and because there are no limits on local bonding capacity.

Commercial Area. The commercial facilities proposed for the area north of Highway 200 and east of the Stemple Pass road are essentially an enlargement of the existing commercial development, although the suggested plan encourages more orderly parking and circulation. Ideally the commercial area would grow northward around an east-west pedestrian mall and with larger parking areas along the northside. This development could be sponsored by a corporation of local businessmen, or it could be developed by an outside entrepreneur. Hopefully suggested planning principles would be adhered to, and existing local businesses would be incorporated in one general shopping center.

Housing. Assuming development of the Anaconda Company mining properties, there will be an extraordinary demand for housing units to meet the needs of construction employees, permanent mine employees, and service personnel. The bulk of this housing, especially at the beginning, will clearly be mobile homes. There is also the possibility of bringing in prefabricated homes which might be built quickly enough to meet the needs of the people moving in. Entrepreneurs might also build inexpensive rental units, although these too would probably have to be prefabricated. Condominium rowhouses or other high density housing might be appropriate close to the center of town. The Farmers Home Administration has a program for funding such housing loans.

The development of residential zoning regulations that will accommodate the highly fluctuating population of Lincoln is crucial. Housing areas will have to be developed so that many mobile homes can be located quickly but for a short period of time. Utilities and sewer systems should then be adaptable to some form of permanent housing. The community and developers will have to take special care that the mobile home areas are made ready for other uses when the construction phase of the mine development is completed. This may be quite difficult as the residents are not going to be departing and arriving concurrently; good planning will require establishment and enforcement of strict regulations.

Governmental and Legal Tools

Governmental Arrangements. Incorporation of Lincoln is important if there is to be orderly development. Even without mining expansion, the community and the valley will probably grow as recreational use of the area increases. Lewis and Clark County Commissioners probably cannot effectively govern the area since they are officed 60 miles away in Helena.

Montana legislation with regard to incorporation is of such a nature that incorporation alone will not solve all the problems of the Blackfoot Valley. For example, in the Missoula area, almost half the people live outside the incorporated city but use services paid for primarily by those living within the city limits. A similar problem could easily develop in Lincoln as the community grows.

New state legislation allowing easier annexation is clearly needed. The objective of easier annexation is to make as even a funding demand as possible on all the people in a user area.

³⁴ See Appendix for "Regulations Concerning Mobile Home Developments".

On the other hand, perhaps state legislation should allow establishment of regional or area government. This arrangement would allow the people of a given area, who share common problems and services, to have political control of that area. In some cases this might necessitate elimination of existing governmental boundaries and enlargement of political divisions. The Lincoln community might be better off if a new political unit were established, which included the area of Lewis and Clark County west of the continental divide.

City-County Planning Board. A city-county planning board is the one existing institution which begins to have the required legal responsibility described above. Although these boards have only advisory capacity under present law, they should be given some powers of initiation and enforcement which would make them considerably more effective in controlling, guiding, and in some cases encouraging regional growth.

Sub-Division Regulations. The community of Lincoln will need a series of ordinances regulating the design of plats and sub-divisions to control development. These will have to be carefully coordinated with the zoning regulations and building codes. The intent of these regulations is to control the size and arrangement of lots within subdivisions, to require developers to provide proper utilities and sewage facilities, to insure safe, well-designed layouts and accurate land measurement, and where possible, to preserve existing trees and other natural features.

Building Codes. Building codes control the actual construction of buildings, their use, size, and type of construction. The main purpose of building codes is to provide for the safety of the general public. Due to the heavy vegetation surrounding the community of Lincoln and the many buildings made of combustable material, the fire danger is serious. By regulating the type of building construction and the distance between buildings, building codes can help to reduce fire danger. A building code for Lincoln might also limit building heights to two or three stories, to preserve something of the rural, wilderness character of the area.

General Character

The present wilderness quality of the Lincoln community is generally considered desirable by most residents, and should be emphasized in future development of the area; many of the planning recommendations suggested in this document should reinforce local efforts to preserve the wilderness character of the area. In addition to aesthetic preservation, the economic value of these planning precautions cannot be overemphasized. Attractive development will undoubtedly perpetuate and increase an already thriving tourist industry, which in turn will be an important stablizing influence on the typically fluctuating mining and lumbering economy.

A first step may be the development of a common architectural style which could be used for store fronts, signs, sidewalks and parking areas. This approach would not necessarily be more expensive than development through individual initiative. The architectural unity could create an aesthetic charm and economic utility equal to Teton Village, Wyoming, or Aspen, Colorado. Alternatives to good community design all too easily can be found in many mining and industrial towns such as Kellogg, Mullen, and Wallace, Idaho. Sensible measures to protect the natural qualities with which Lincoln is so well endowed are fundamental to a future healthy existence.



Appendix A

COPPER CREEK SKI AREA STUDY, LINCOLN, MONTANA*

The Soil Conservation Service has taken snow measurements in the Copper Creek Area, and their records indicate that the proposed ski slopes would have adequate snow from early December through April. The snowfall in the area comes in small quantities, but frequent intervals; this is ideal for skiing. Before proceeding with development of the area however, more detailed information on snowfall and prevailing winds should be obtained.

The proposed site on the north slopes of Stonewall Mountain provides an ideal location; this is especially important as a high percentage of the days are sunny during the ski season. There do not appear to be major avalanche hazards on the proposed slopes, although this too should be investigated in greater detail. The varied topography of the area will allow different types of ski runs with a total vertical drop of 2,200 feet.

These general conditions and the variety of slopes combine to make the Copper Creek area potentially competitive with other Montana developments such as Bridger Bowl and Big Mountain. In addition to downhill skiing, the area offers good opportunity for cross-country skiing and snowmobiling. Beautiful views, good fishing, and easy access for hiking and pack trips into the wilderness areas to the north provide good potential for summer recreation development as well.

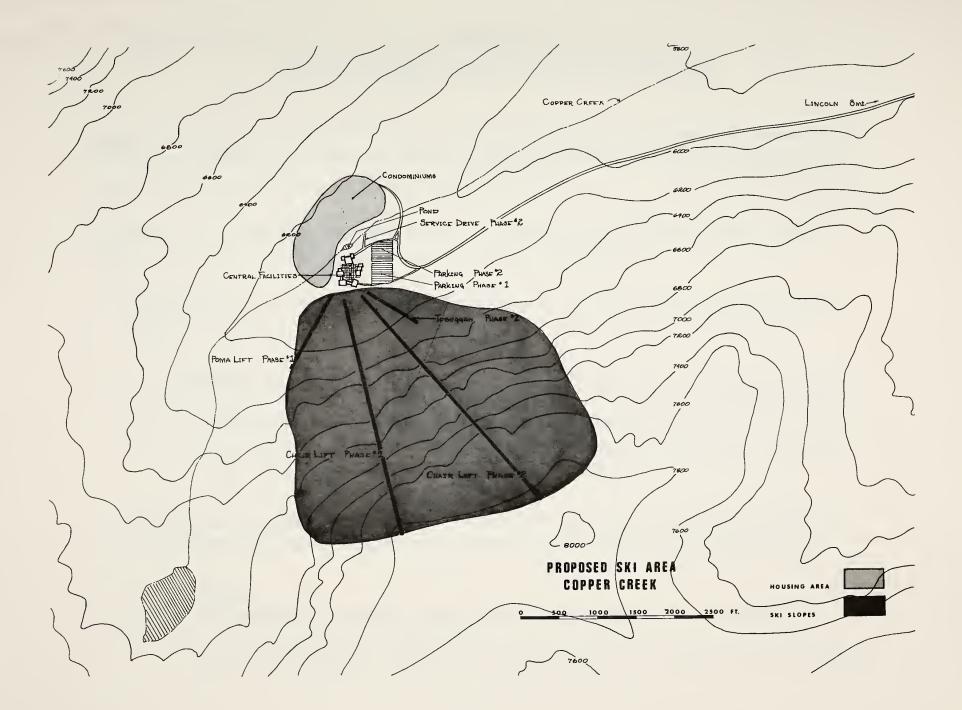
The proposed area is large enough to handle up to 2,600 people, and the ski lifts are designed to meet that capacity. The area at the bottom of the proposed slopes has a gentle gradient over

^{*}Abstracted from thesis by Greg Aldrich, School of Architecture, Montana State University, 1970.

an area large enough to contain numerous service buildings including eating facilities, shops, dormatories, parking and possibly some limited condominium-type development.

The capital investment costs of this project would probably exceed half a million dollars. If the area is developed, it is important that adequate financial backing be available to advertise the area thoroughly since success will depend on a high volume of use.

Ski resorts are generally low-profit enterprises when dependent only on selling lift tickets. Their economic feasibility can be greatly enhanced however by operating them incconjunction with other enterprises such as restaurants, motels, and private housing. This type of development is advisable as long as public agencies insist on careful consideration of environmental planning, and effective means of review and control of the planning and design process.



Appendix B

OUTLINE FOR SUGGESTED REGULATIONS FOR MOBILE HOME PARKS

<u>Purpose</u> - Hopefully, these suggestions will provide flexibility in land development in order to maximize preservation of the natural and scenic qualities of open space while providing appropriate mobile home facilities and eliminating public hazards.

<u>Procedure</u> - A building permit and certificate of occupancy must be obtained from the zoning administrator for all mobile home parks within the planning district.

Zoning permit - The Planning Commission must approve a site plan before issuing a zoning permit.

Conditions

- a. The site plan must include all physical features relevant to the proposed plan (location of homes, landscaping, utilities, parking space, etc.)
- b. The developer must file a performance and maintenance guarantee bond to insure proper installation and maintenance of all facilities.

<u>Certificates of occupancy</u> - The zoning administrator shall grant a periodic certificate of occupancy, and inspect each park semi-annually for conformance with regulations.

Conditions

- a. The proprietor of a mobile home park must keep a register reporting names and home descriptions for all occupants.
- b. The mobile home park as well as the register shall be subject to periodic inspection.

Compliance - The developer of a proposed mobile home park must receive subdivision plat approval in accordance with the subdivision regulations of the municipality.

Park Site - Shall consist of a minimum of 10 acres of suitable land under single or unified ownership.

Lot Requirements - Shall include drainage and grading for safety, but with maintenance for as much natural growth as possible.

Minimum size of lots - Shall consist of a minimum of 5,400 sq. feet of lot area, and not less than 45 feet wide at the building setback line, exclusive of easements.

Maximum number of lots - Shall be computed by subtracting from the total gross area a fixed percentage of 20% of said area, and dividing the remaining 80% by the minimum lot requirements.

Yard and setback requirements - All homes shall be located at least 75 feet from any street right-of-way which abutts a park boundary, and at least 100 feet from any other lot or boundary line. A minimum distance of 25 feet shall be allowed between an individual mobile home and adjoining pavement of a park street, or common area. All homes shall be separated by at least 30 feet.

Park Street System

Park access: Access shall be designed to minimize hazards and maximize free movement. Each park must have two driveways at least 150 feet apart.

Lot access: Safety and convenience must be provided to and from every mobile home lot; access roads must be properly adapted to existing topography.

<u>Streets</u>: All streets within a park shall have a minimum right-of-way width of 50 feet, a minimum cartway width of 36 feet, and a minimum pavement width of 24 feet. One-way streets shall follow municipal specifications.

<u>Intersections</u>: No more than two streets shall intersect at one point, and a distance of at least 150 feet shall be maintained between centerlines of offset intersection streets.

Required off-street parking - At least 1.5 vehicular parking spaces shall be furnished for each lot, and shall not exceed a distance of 300 feet from the lot it is intended to serve.

Utility improvements

<u>Water distribution</u>: Each lot will be provided with a continuing water supply approved by the State Department of Health.

<u>Sewage disposal</u>: Each lot will be connected to a centralized sanitary sewage disposal system which shall be approved by the State Department of Health. Pollution of any natural water-course shall be prohibited. The State Department of Health must approve sewage disposal and water distribution systems before a building permit is issued.

<u>Usable open space</u> - All parks shall provide a minimum of 10% of the total land area to be used for open space purposes, and to be located in an area of minimum hazards and maximum accessibility for all park residents.

<u>Buffer strips</u> - A suitable landscaped buffer strip at least 20 feet wide, approved by the Planning Commission shall be provided along all property and street boundary lines.

Walkways - Adequate pedestrian walks shall be maintained for residents.

<u>Signs and lighting</u> - Sign regulations shall be uniform throughout the planning district. All driveways and streets shall be adequately lighted.

Other Site Improvements.

- a. One fire alarm box or public telephone shall be provided for each park. Each home will be located within 150 feet of a fire extinguisher.
- b. The park operator shall provide garbage collection at least once a week, and waste collection stations for every 12 lots shall be located no further than 150 feet from the lot served. Refuse disposal sites within the park area shall be subject to approval of the State Department of Health.
- c. Permits may be obtained for construction of enclosures attached to homes, providing such enclosures do not exceed 100% of the floor area of the mobile home.
- d. Sale of mobile homes from a mobile home park shall be prohibited.
- e. The Planning Commission may require other improvements in each park that are considered in the best interests of park residents.

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